

STIC Search Report

STIC Database Tracking Number: 182976

TO: Kallambella M Vijayakumar

Location: REM 9D70

Art Unit: 1751 March 23, 2006

Case Serial Number: 10/669403

From: Ross Shipe Location: EIC 1700

REMSEN 4B31

Phone: 571/272-6018 Ross.Shipe@uspto.gov

Search Notes

Examiner Vijayakumar:

Please review the attached search results.

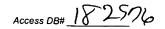
17 hits which goes from page 2 to the end.

If you have any questions or if you would like to refine the search query, please feel free to contact me at any time.

Thanks you for using EIC 1700 search services!

Ross Shipe (ASRC) Technical Information Specialist





SEARCH REQUEST FORM

Scientific and Technical Information Center

| Requester's Full Name: | i jeyokumer | Examiner #: Date: Serial Number: 10/667 esults Format Preferred (circle): PAPE | |
|---|--|--|---------------------------------------|
| Art Unit: Phon | e Number 30 | Serial Number: | 403 |
| Mail Box and Bldg/Room Locat | ion: R | esults Format Preferred (circle): PAPE | CDISK E-MAIL |
| If more than one search is sul | bmitted, please prior | itize searches in order of need. | ****** |
| Please provide a detailed statement of Include the elected species or structure utility of the invention. Define any ter known. Please attach a copy of the cov | the search topic, and descri s, keywords, synonyms, ac ms that may have a special er sheet, pertinent claims, a | be as specifically as possible the subject matter ronyms, and registry numbers, and combine we meaning. Give examples or relevant citations and abstract. | to be searched. |
| Title of Invention: | netter for | epplication | |
| Inventors (please provide full names) | | | |
| | | | |
| Earliest Priority Filing Date: | | · | |
| *For Sequence Searches Only* Please in appropriate serial number. | clude all pertinent informatio | on (parent, child, divisional, or issued patent numb | ers) along with the |
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| STAFF USE ONLY | ******** | ******* | ****** |
| Searcher: RS | Type of Search NA Sequence (#) | Vendors and cost where applic | ıble |
| Searcher Phone #: | | | |
| Searcher Location: | AA Sequence (#) | Dialog | |
| Date Searcher Picked Up: | Structure (#) Bibliographic | Questel/Orbit | |
| Date Completed: 3/23/06 | Litigation | Dr.Link | |
| Searcher Prep & Review Time: 30 | Fulltext | Lexis/Nexis | *** |
| Clerical Prep Time: | Patent Family | Sequence Systems | |
| Online Time: 126 | Other | Other (specify) | · · · · · · · · · · · · · · · · · · · |
| | | Other (specify) | |

PTO-1590 (8-01)

Banks, Kendra

182976

From:

KALLAMBELLA VIJAYAKUMAR [kallambella.vijayakumar@uspto.gov]

Sent:

Wednesday, March 22, 2006 4:20 PM

To:

STIC-EIC1700

Subject:

Database Search Request, Serial Number: 10/669,403

Requester:

KALLAMBELLA VIJAYAKUMAR (P/1751)

Art Unit:

GROUP ART UNIT 1751

Employee Number:

79358

Office Location:

REM 09D70

Phone Number:

(571) 272 - 1324

Mailbox Number:

SCIENTIFIC REFERENCE BR

MAR 2 3 RECU

Pat. & T.M. Office

Case serial number:

10/669,403

Class / Subclass(es):

252/301.16, 299.61; 568/610, 630, 649, 664

Earliest Priority Filing Date:

09/24/2003

Format preferred for results:

Paper

Search Topic Information:

Claims 22-23

Special Instructions and Other Comments:



United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
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Alxandris, Virginis 22313-1450
www.uspio.gov

BIBDATASHEET

Bib Data Sheet

CONFIRMATION NO. 5058

| | | | | | | | | |
|--|--|-----------------------------------|------------|------------------|-------------------|----------|-------|-----------------------------------|
| SERIAL NUME 10/669,403 | | FILING DATE 09/24/2003 RULE | | CLASS 252 | GROUP ART 1751 | UNIT | | RNEY DOCKET NO. :0315 US NA |
| APPLICANTS | | | | | | | | |
| Viacheslav | A. Peti | rov, Hockessin, DE; | | | • | | | |
| Daniel Dav | id Leck | oux, Buellton, CA; | | | | | | |
| ** CONTINUING E | DATA * | W | • | | | | | |
| ** FOREIGN APPL | ** FOREIGN APPLICATIONS ************************************ | | | | | | | |
| IF REQUIRED, FOREIGN FILING LICENSE GRANTED ** 12/17/2003 | | | | | | | | |
| Foreign Priority claimed 35 USC 119 (a-d) conditi | inns mal | yes 201 no | | STATE OR | SHEETS | TOT | ΓAL | INDEPENDENT |
| Verified and Acknowledged Examiner's Signature Indians COUNTRY DRAWING CLAIMS CLAIMS | | | | | CLAIMS 6 | | | |
| ADDRESS 23906 E I DU PONT DE NEMOURS AND COMPANY LEGAL PATENT RECORDS CENTER BARLEY MILL PLAZA 25/1128 4417 LANCASTER PIKE WILMINGTON , DE | | | | | | | | |
| TITLE Method for the appl | lication | of active materials onto a | active sur | faces and device | es made with su | ch metho | ods . | |
| FILING FEE FEES: Authority has been given in Paper No to charge/credit DEPOSIT ACCOUNT RECEIVED 1502 All Fees 1.16 Fees (Filing) 1.17 Fees (Processing Ext. of time) 1.18 Fees (Issue) Other | | | | | g Ext. of time) | | | |
| Credit | | | | | - 11 | | | |

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10

15

TITLE

METHOD FOR THE APPLICATION OF ACTIVE MATERIALS ONTO ACTIVE SURFACES AND DEVICES MADE WITH SUCH METHODS ABSTRACT OF THE INVENTION

The invention provides methods for the application of active materials onto active surfaces useful in organic electronic devices. The methods of the invention include selecting a liquid composition including an active material and a suitable liquid medium whereby when the liquid composition is deposited on the desired active surface it has no greater than about a 40° contact angle; treating the active surface to raise its surface tension before the deposition of a liquid composition containing the desired active material is deposited thereon; and combination thereof. The invention also provides organic electronic devices having at least two active layers, wherein at least one active layer comprises an active material that was deposited using at least one practice of the method of the invention.

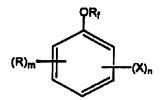
Page 2

Amendments to Claims

- 1. (Cancelled)
- 2. (Cancelled)
- 3. (Cancelled)
- 4. (Cancelled)
- 5. (Cancelled)
- 6. (Cancelled)
- 7. (Cancelled)
- 8. (Cancelled)
- 9. (Cancelled)
- 10. (Cancelled)
- 11. (Cancelled)
- 12. (Cancelled)
- 13. (Cancelled)
- 14. (Cancelled)
- 15. (Previously Presented) A composition for depositing an active material onto a surface, said composition comprising:

the active material; and

at least one material selected from compounds having the structure



wherein:

R is C_1 - C_{10} alkyl, C_1 - C_{10} alkoxy, or C_1 - C_{10} oxyalkyl,

R_f is C₂-C₃ fluorinated alkyl, C₁-C₁₀ fluorinated alkenyl, C₁-C₁₀ fluorinated oxyalkyl, or C₁-C₁₀ fluorinated oxyalkenyl,

X is H, F, Cl, Br, C₁-C₁₀ alkyl, C₁-C₁₀ alkoxy C₁-C₁₀ oxyalkyl, C₁-C₁₀ fluorinated alkyl, C₁-C₁₀ fluorinated alkenyl, C₁-C₁₀ fluorinated oxyalkyl, or C₁-C₁₀ fluorinated oxyalkenyl,

m is from 0-5, and

n is from 0-5, wherein m + n is no greater than 5.

Page 3

- 16. (Cancelled)
- 17. (Cancelled)
- 18. (Cancelled)
- 19. (Cancelled)
- 20. (Cancelled)
- 21. (Cancelled)
- 22. (Previously Presented) A composition for depositing an active material onto a surface, said composition comprising:

the active material; and

at least one compound selected from compounds A through O and mixtures thereof:

Page 4

23. (New) A composition for depositing an active material onto a surface, said composition comprising:

the active material; and at least one material selected from compounds having the structure

$$(R)_m$$
 $(X)_n$

wherein:

R is C₁-C₁₀ alkyl, C₁-C₁₀ alkoxy, or C₁-C₁₀ oxyalkyl,

R_ℓ is C₂-C₃ fluorinated alkyl, C₁-C₁₀ fluorinated alkenyl, C₁-C₁₀ fluorinated oxyalkyl, or C₁-C₁₀ fluorinated oxyalkenyl,

Page 5

X is H, P, Cl, Br, C₁-C₁₀ alkyl, C₁-C₁₀ alkoxy C₁-C₁₀ oxyalkyl, C₁-C₁₀ fluorinated alkyl, or C₁-C₁₀ fluorinated oxyalkyl, m is from 0-5, and n is from 0-5, wherein m + n is no greater than 5.



EIC17000

Questions about the scope or the results of the search? Contact the EIC searcher or contact:

Kathleen Fuller, EIC 1700 Team Leader 571/272-2505 REMSEN 4B28

| Voluntary Results Feedback Form |
|---|
| I am an examiner in Workgroup: Example: 1713 Relevant prior art found, search results used as follows: |
| ☐ 102 rejection |
| 103 rejection |
| Cited as being of interest. |
| Helped examiner better understand the invention. |
| Helped examiner better understand the state of the art in their technology. |
| Types of relevant prior art found: |
| ☐ Foreign Patent(s) |
| Non-Patent Literature (journal articles, conference proceedings, new product announcements etc.) |
| > Relevant prior art not found: |
| Results verified the lack of relevant prior art (helped determine patentability). |
| Results were not useful in determining patentability or understanding the invention |
| Comments: |

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(FILE 'HOME' ENTERED AT 09:44:08 ON 23 MAR 2006)

FILE 'REGISTRY' ENTERED AT 09:57:38 ON 23 MAR 2006

L6 STRUCTURE

L10 SCR 1839

50 SEA SSS SAM L6 NOT L10 L12

L13 11783 SEA SSS FUL L6 NOT L10

SAV L13 VIJ403/A STRUCTURE L16

FILE 'REGISTRY' ENTERED AT 11:02:19 ON 23 MAR 2006

50 SEA SUB=L13 SSS SAM L16 L17

D L17 OUE STAT

L18 2231 SEA SUB=L13 SSS FUL L16

SAV L18 VIJ403A/A

FILE 'HCAPLUS' ENTERED AT 11:27:11 ON 23 MAR 2006

846 SEA ABB=ON PLU=ON L18 L19

509121 SEA ABB=ON PLU=ON EL OR E (W) L OR OLED OR LED OR L20

LIGHT (W) EMITT? OR SEMICONDUCTOR (W) DEVICE#

L21

9 SEA ABB=ON PLU=ON L19 AND L20 9 SEA ABB=ON PLU=ON L19 AND ELECTRIC PHENOMENA/SC,SX 17 SEA ABB=ON PLU=ON L21 OR L22 L22

L23

=> file reg

FILE 'REGISTRY' ENTERED AT 11:47:30 ON 23 MAR 2006

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=> d 123 que stat

L6 STR

NODE ATTRIBUTES:

DEFAULT MLEVEL IS ATOM

DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RSPEC 2

NUMBER OF NODES IS

STEREO ATTRIBUTES: NONE

L10 SCR 1839

11783 SEA FILE=REGISTRY SSS FUL L6 NOT L10 L13

L16 STR

NODE ATTRIBUTES:

DEFAULT MLEVEL IS ATOM DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RSPEC 2

NUMBER OF NODES IS

STEREO ATTRIBUTES: NONE

L18 2231 SEA FILE=REGISTRY SUB=L13 SSS FUL L16

846 SEA FILE=HCAPLUS ABB=ON PLU=ON L18
509121 SEA FILE=HCAPLUS ABB=ON PLU=ON EL OR E (W) L OR OLED 1.19

L20

OR LED OR LIGHT (W) EMITT? OR SEMICONDUCTOR (W) DEVICE#

9 SEA FILE=HCAPLUS ABB=ON PLU=ON L19 AND L20 L21

L22 9 SEA FILE=HCAPLUS ABB=ON PLU=ON L19 AND ELECTRIC

PHENOMENA/SC, SX

L23 17 SEA FILE=HCAPLUS ABB=ON PLU=ON L21 OR L22

=> file hcaplus

FILE 'HCAPLUS' ENTERED AT 11:47:49 ON 23 MAR 2006

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=> d 123 1-17 ibib abs hitstr hitind

L23 ANSWER 1 OF 17 HCAPLUS COPYRIGHT 2006 ACS on STN 2005:431449 HCAPLUS

ACCESSION NUMBER: DOCUMENT NUMBER:

TITLE: Siloxanes containing trifluorovinyl ether group

and sol-gel hybrid polymers prepared by using

the same

INVENTOR(S): Lee, Jae-Suk; Lee, Kwan-Soo; Song, Ho-Suk; Kim,

Jae-Pil

PATENT ASSIGNEE(S): S. Korea

SOURCE: U.S. Pat. Appl. Publ., 22 pp.

CODEN: USXXCO

DOCUMENT TYPE:

Patent LANGUAGE: English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---------------|------|----------|-----------------|--------|
| US 2005107561 | A1 | 20050519 | US 2004-881557 | 200406 |

Ross Shipe EIC 1700 Remsen 4B31 571/272-6018

JP 2005146257 A2 20050609 JP 2004-210382

200407 16

PRIORITY APPLN. INFO.:

KR 2003-81489

200311 18

OTHER SOURCE(S): MARPAT 142:464464

AB The invention relates to a siloxane monomer contg. a trifluorovinyl ether group and a sol-gel hybrid polymer prepd. using the monomer, more particularly to siloxane monomer with novel structure prepd. by reacting alkoxychlorosilane with a Grignard reagent contg. a trifluorovinyl ether (-OC2F3) group, a method of prepg. the same and a sol-gel hybrid polymer contg. a perfluorocyclobutane (PFCB) group prepd. from sol-gel reaction using said siloxane monomer contg. a trifluorovinyl ether group. This hybrid polymer exhibits low birefringence and high silicon-wafer adhesivity and heat resistance. A typical hybrid polymer was manufd. by reaction of 1 mol [3-(trifluorovinyloxy)phenyl]triethoxysilane with 9 mol 3-(triethoxysilyl)propyl methacrylate in water and HCl, radical polymn. of the resulting sol-gel-prepd. monomer in the presence of 2,2-dimethyl-2-phenylacetophenone, and heating at 160°.

IT 272124-01-3P, 3-(2-Bromotetrafluoroethoxy)-1-bromobenzene RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)

(monomer precursor; siloxanes contg. trifluorovinyl ether group for sol-gel hybrid polymers contg. perfluorocyclobutyl crosslinking groups with low birefringence and high adhesivity and heat resistance)

RN 272124-01-3 HCAPLUS

CN Benzene, 1-bromo-3-(2-bromo-1,1,2,2-tetrafluoroethoxy)- (9CI) (CA INDEX NAME)

IC ICM C08G077-24

INCL 528042000; 528012000

CC 37-3 (Plastics Manufacture and Processing)

Section cross-reference(s): 76

T 260262-38-2P, 1-Bromo-3-(trifluorovinyloxy)benzene 272124-01-3P, 3-(2-Bromotetrafluoroethoxy)-1-bromobenzene

RL: IMF (Industrial manufacture); RCT (Reactant); PREP

(Preparation); RACT (Reactant or reagent)

(monomer precursor; siloxanes contg. trifluorovinyl ether group for sol-gel hybrid polymers contg. perfluorocyclobutyl crosslinking groups with low birefringence and high adhesivity

and heat resistance)

L23 ANSWER 2 OF 17 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2005:268380 HCAPLUS

DOCUMENT NUMBER: 143:247987

TITLE: Influence of homoallylic fluorine atoms on the

regioselectivity of the Wacker reaction

AUTHOR(S): Guidotti, J.; Tordeux, M.; Blazejewski, J.-C.;

Wakselman, C.

CORPORATE SOURCE: SIRCOB, UMR CNRS 8086, Universite de Versailles,

Versailles, 78035, Fr.

```
Letters in Organic Chemistry (2005), 2(2),
SOURCE:
                         148-150
                         CODEN: LOCEC7; ISSN: 1570-1786
                         Bentham Science Publishers Ltd.
PUBLISHER:
DOCUMENT TYPE:
LANGUAGE:
                         English
     Wacker oxidn. reaction of terminal olefins bearing one or two
     fluorine atoms at a homoallylic position led to a ratio
     aldehyde/methyl ketone much higher than that obsd. with their
     nonfluorinated analogs. This regioselectivity can be ascribed to a
     specific interaction between fluorine atoms and palladium, or to a
     peculiar influence of the halogens on the double bond.
IT
     863506-02-9P
     RL: CPS (Chemical process); PEP (Physical, engineering or chemical
     process); RCT (Reactant); SPN (Synthetic preparation); PREP
     (Preparation); PROC (Process); RACT (Reactant or reagent)
        (effect of homoallylic fluorine atoms on regioselectivity of the
        Wacker reaction)
RN
     863506-02-9 HCAPLUS
CN
     Benzene, [(1,1-difluoro-3-butenyl)oxy] - (9CI) (CA INDEX NAME)
H_2C = CH - CH_2 - CF_2 - OPh
IT
     863506-05-2P 863506-08-5P
     RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation);
     RACT (Reactant or reagent)
        (effect of homoallylic fluorine atoms on regioselectivity of the
        Wacker reaction)
RN
     863506-05-2 HCAPLUS
    2-Butanone, 4,4-difluoro-4-phenoxy- (9CI) (CA INDEX NAME)
CN
Me^-C^-CH_2^-CF_2^-OPh
RN
     863506-08-5 HCAPLUS
    Butanal, 4,4-difluoro-4-phenoxy- (9CI) (CA INDEX NAME)
Pho-CF2-CH2-CH2-CHO
IT
     863506-12-1P 863506-13-2P
    RL: SPN (Synthetic preparation); PREP (Preparation)
        (effect of homoallylic fluorine atoms on regioselectivity of the
        Wacker reaction)
RN
     863506-12-1 HCAPLUS
     2-Butanol, 4,4-difluoro-4-phenoxy- (9CI) (CA INDEX NAME)
CN
   OH
Me-CH-CH2-CF2-OPh
RN
    863506-13-2 HCAPLUS
CN
     1-Butanol, 4,4-difluoro-4-phenoxy- (9CI) (CA INDEX NAME)
```

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HO-(CH_2)_3-CF_2-OPh
```

CC 22-7 (Physical Organic Chemistry)

IT 140135-77-9P 863506-02-9P

RL: CPS (Chemical process); PEP (Physical, engineering or chemical process); RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); PROC (Process); RACT (Reactant or reagent)

(effect of homoallylic fluorine atoms on regioselectivity of the Wacker reaction)

IT 863506-04-1P 863506-05-2P 863506-07-4P 863506-08-5P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation);
RACT (Reactant or reagent)

(effect of homoallylic fluorine atoms on regioselectivity of the Wacker reaction)

IT 2550-26-7P 18328-11-5P, Benzenebutanal 19790-62-6P 22409-85-4P 863506-06-3P 863506-09-6P 863506-10-9P 863506-11-0P 863506-12-1P 863506-13-2P

RL: SPN (Synthetic preparation); PREP (Preparation)
(effect of homoallylic fluorine atoms on regioselectivity of the Wacker reaction)

REFERENCE COUNT: 17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L23 ANSWER 3 OF 17 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2005:259200 HCAPLUS

DOCUMENT NUMBER: 1

142:327506

TITLE:

Method for the application of active materials onto active surfaces and devices made with such

methods

INVENTOR(S):

Petrov, Viacheslav A.; Lecloux, Daniel David

PATENT ASSIGNEE(S): USA

SOURCE:

U.S. Pat. Appl. Publ., 14 pp.

CODEN: USXXCO

DOCUMENT TYPE:

Pá

LANGUAGE:

Patent English

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE - |
|-----------------------------|--------------------------|--------------------------------|---|------------------------|
| US 2005062021 | A 1 | 20050324 | US 2003-669403 | 200309 |
| WO 2005031889 | A2 | 20050407 | WO 2004-US31246 | 24 200409 22 |
| WO 2005031889 W: AE. AG. | | | A, BB, BG, BR, BW, BY | |
| CH, CN, GB, GD, | CO, CR, CU GE, GH, GM | J, CZ, DE, DI M, HR, HU, II | K, DM, DZ, EC, EE, EG D, IL, IN, IS, JP, KE J, LV, MA, MD, MG, MK | , ES, FI, , KG, KP, |
| MX, MZ, SE, SG, | NA, NI, NO |), NZ, OM, PC (, TJ, TM, TM | G, PH, PL, PT, RO, RU N, TR, TT, TZ, UA, UG | , SC, SD, |
| RW: BW, GH, AM, AZ, | GM, KE, LS BY, KG, KZ | S, MW, MZ, NA Z, MD, RU, TS | A, SD, SL, SZ, TZ, UG J, TM, AT, BE, BG, CH R, HU, IE, IT, LU, MC | , CY, CZ, |

applicant

Ross Shipe EIC 1700 Remsen 4B31 571/272-6018

PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

US 2005269550 A1 20051208 US 2005-154925

200506 16

PRIORITY APPLN. INFO.:

US 2003-669403

200309

24

OTHER SOURCE(S): MARPAT 142:327506

AB The invention provides methods for the application of active materials onto active surfaces useful in org. electronic devices. The methods of the invention include selecting a liq. compn. including an active material and a suitable liq. medium whereby when the liq. compn. is deposited on the desired active surface it has no greater than about a 40° contact angle; treating the active surface to raise its surface tension before the deposition of a liq. compn. contg. the desired active material is deposited thereon; and combination thereof. The invention also provides org. electronic devices having at least two active layers, wherein at least one active layer comprises an active material that was deposited using at least one practice of the method of the invention.

IT 3832-65-3 3914-19-0 4063-48-3

847991-51-9 847991-52-0 847991-53-1

847991-54-2 847991-55-3 848365-56-0

RL: PEP (Physical, engineering or chemical process); PYP (Physical process); TEM (Technical or engineered material use); PROC (Process); USES (Uses)

(method for application of active materials onto active surfaces and org. devices made with such methods)

RN 3832-65-3 HCAPLUS

CN Benzene, 1,4-bis(1,1,2,2-tetrafluoroethoxy)- (8CI, 9CI) (CA INDEX NAME)

RN 3914-19-0 HCAPLUS

CN Benzene, 1,3-bis(1,1,2,2-tetrafluoroethoxy)- (8CI, 9CI) (CA INDEX NAME)

RN 4063-48-3 HCAPLUS

CN Benzene, 1,2-bis(1,1,2,2-tetrafluoroethoxy)- (8CI, 9CI) (CA INDEX NAME)

RN 847991-51-9 HCAPLUS

CN Benzene, 1-methoxy-4-(1,1,2,2-tetrafluoroethoxy)- (9CI) (CA INDEX NAME)

RN 847991-52-0 HCAPLUS

CN Benzene, 1-ethoxy-4-(1,1,2,2-tetrafluoroethoxy)- (9CI) (CA INDEX NAME)

RN 847991-53-1 HCAPLUS

CN Benzene, 1-ethoxy-2-(1,1,2,2-tetrafluoroethoxy)- (9CI) (CA INDEX NAME)

RN 847991-54-2 HCAPLUS

CN Benzene, 1-(1,1-dimethylethyl)-4-(1,1,2,2-tetrafluoroethoxy)- (9CI) (CA INDEX NAME)

RN 847991-55-3 HCAPLUS

CN Benzene, 1-(1-methylpropyl)-4-(1,1,2,2-tetrafluoroethoxy)- (9CI) (CA INDEX NAME)

```
Me
                     CH-
                        - Et
F2CH-CF2-0
     848365-56-0 HCAPLUS
RN
CN
     Benzene, 1-ethyl-2-(1,1,2,2-tetrafluoroethoxy)- (9CI)
     NAME)
       Εt
       O-CF2-CHF2
    ICM B32B009-04
     ICS H01B001-00
INCL 252500000
CC
     76-3 (Electric Phenomena)
     Section cross-reference(s): 38, 48, 74
IT
     Adhesive films
     Coating process
     Conducting polymers
     Electric corona
     Etching
     Glass substrates
     Ink-jet printing
     Ion bombardment
     Laser ablation
     Photolysis
     Plasma
     Reduction, electrochemical
     Screen printing
       Semiconductor device fabrication
       Semiconductor devices
        (method for application of active materials onto active surfaces
        and org. devices made with such methods)
IT
     98-08-8, Trifluoromethylbenzene
                                       402-31-3, 1,3-
     Bis(trifluoromethyl)benzene
                                  1077-16-3, 1-Phenylhexane
     3832-65-3 3914-19-0 4063-48-3
     50926-11-9, Indium tin oxide 847991-51-9
     847991-52-0 847991-53-1 847991-54-2
     847991-55-3 848365-56-0
     RL: PEP (Physical, engineering or chemical process); PYP (Physical
     process); TEM (Technical or engineered material use); PROC
     (Process); USES (Uses)
        (method for application of active materials onto active surfaces
        and org. devices made with such methods)
L23 ANSWER 4 OF 17 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER:
                         2004:835817 HCAPLUS
DOCUMENT NUMBER:
                         142:23584
TITLE:
                         Synthesis of functional polymers-vinylidene
                         fluoride based fluorinated copolymers and
                         terpolymers bearing bromoaromatic side-group
```

AUTHOR (S):

Souzy, R.; Ameduri, B.; Boutevin, B.

CORPORATE SOURCE:

Laboratory of Macromolecular Chemistry, UMR (CNRS) 5076, Ecole Nationale Superieure de Chimie de Montpellier, Montpellier, 34296/05,

Fr.

SOURCE:

Journal of Polymer Science, Part A: Polymer

Chemistry (2004), 42(20), 5077-5097

CODEN: JPACEC; ISSN: 0887-624X

PUBLISHER:

John Wiley & Sons, Inc.

DOCUMENT TYPE:

Journal

LANGUAGE:

English

The radical co- and terpolymn. of $4-[(\alpha,\beta,\beta$ trifluorovinyl)oxy]bromo benzene (TFVOBB) with 1,1-difluoroethylene (or vinylidene fluoride, VDF, or VF2), hexafluoropropene (HFP), perfluoromethyl vinyl ether (PMVE), and chlorotrifluroroethylene (CTFE) is presented. Although TFVOBB could be thermocyclodimerized, it could not homopolymerize under radical initiation. TFVOBB could be copolymd. in soln. under a radical initiator with VDF or CTFE comonomers, while its copolymn. with HFP or PMVE were unsuccessful. The terpolymn. of TFVOBB with VDF and HFP, or VDF and PMVE, or VDF and CTFE also led to original fluorinated terpolymers bearing bromoarom. side-groups. The conditions of co- and terpolymn. were optimized in terms of the nature of the radical initiators, and of the nature of solvents (fluorinated or nonhalogenated). Various monomer concns. in the co- and terpolymers were assessed by 19F and 1H-NMR spectroscopy. The thermal and physico chem. properties were also studied.

T 113939-45-0P, 4-(2-Bromotetrafluoroethoxy)bromobenzene
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation);
RACT (Reactant or reagent)

(monomer synthesis; synthesis of functional polymers-vinylidene fluoride based fluorinated copolymers and terpolymers bearing bromoarom. side-group)

RN 113939-45-0 HCAPLUS

CN Benzene, 1-bromo-4-(2-bromo-1,1,2,2-tetrafluoroethoxy)- (9CI) (CA INDEX NAME)

CC 35-4 (Chemistry of Synthetic High Polymers)

IT 113939-45-0P, 4-(2-Bromotetrafluoroethoxy) bromobenzene

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(monomer synthesis; synthesis of functional polymers-vinylidene fluoride based fluorinated copolymers and terpolymers bearing bromoarom. side-group)

REFERENCE COUNT:

THERE ARE 114 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE

IN THE RE FORMAT

L23 ANSWER 5 OF 17 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:

2004:687171 HCAPLUS

DOCUMENT NUMBER:

141:350213

TITLE:

Preparation of (phenyldifluoromethyl) - and

(phenoxydifluoromethyl)-silanes by magnesium-promoted carbon-chlorine bond

activation

```
AUTHOR(S):
                          Guidotti, Jerome; Metz, Francois; Tordeux, Marc;
                          Wakselman, Claude
CORPORATE SOURCE:
                          SIRCOB-CNRS, Batiment Lavoisier, Universite de
                          Versailles, Versailles, 78035, Fr.
                          Synlett (2004), (10), 1759-1762
SOURCE:
                          CODEN: SYNLES; ISSN: 0936-5214
                          Georg Thieme Verlag
PUBLISHER:
DOCUMENT TYPE:
                          Journal
LANGUAGE:
                          English
                          CASREACT 141:350213
OTHER SOURCE(S):
     Treatment of \alpha-chloro-\alpha, \alpha-difluorotoluene and
     \alpha-chloro-\alpha,\alpha-difluoroanisole with
     chlorotrimethylsilane in the presence of Mg in DMF led to their corresponding trimethylsilyl derivs. These compds. are able
     to transfer their fluorinated group to various electrophilic
     substrates (carbonyl compds., disulfides, Ph isocyanate). E.g.,
     addn. reaction of KF and 2-furylcarboxaldehyde to a DMF soln. were
     followed by PhCF2SiMe3 reagent to give 93% yield of
     PhCF2CHOH-2-furan.
IT
     774539-43-4P
     RL: SPN (Synthetic preparation); PREP (Preparation)
         (reaction of propanal with (phenoxydifluoromethyl)silane
        difluoroalkylating reagent to give (phenoxydifluoromethyl)propano
RN
     774539-43-4 HCAPLUS
CN
     2-Butanol, 1,1-difluoro-1-phenoxy- (9CI) (CA INDEX NAME)
    OH
Et-CH-CF2-OPh
     29-6 (Organometallic and Organometalloidal Compounds)
CC
     774539-43-4P
     RL: SPN (Synthetic preparation); PREP (Preparation)
        (reaction of propanal with (phenoxydifluoromethyl)silane
        difluoroalkylating reagent to give (phenoxydifluoromethyl)propano
        1)
REFERENCE COUNT:
                          17
                                THERE ARE 17 CITED REFERENCES AVAILABLE
                                 FOR THIS RECORD. ALL CITATIONS AVAILABLE
                                IN THE RE FORMAT
L23 ANSWER 6 OF 17 HCAPLUS COPYRIGHT 2006 ACS on STN
                          2004:272004 HCAPLUS
ACCESSION NUMBER:
DOCUMENT NUMBER:
                          140:311881
TITLE:
                          Dry imaging material containing organic
                          electrically conductive polymer antistatic agent
INVENTOR(S):
                          Hanyu, Takeshi
PATENT ASSIGNEE(S):
                          Konica Minolta Holdings Inc., Japan
SOURCE:
                          Jpn. Kokai Tokkyo Koho, 32 pp.
                          CODEN: JKXXAF
DOCUMENT TYPE:
                          Patent
                          Japanese
LANGUAGE:
FAMILY ACC. NUM. COUNT:
PATENT INFORMATION:
     PATENT NO.
                          KIND
                                 DATE
                                              APPLICATION NO.
                                                                       DATE
     -----
     JP 2004101881
                           A2
                                  20040402
                                              JP 2002-263866
                                                                       200209
```

PRIORITY APPLN. INFO.:

JP 2002-263866

200209 10

10

OTHER SOURCE(S): MARPAT 140:311881

AB The dry imaging material comprises a photosensitive Ag halide grain, an org. Ag salt, a reducing agent, and a binder, ≥1 of layers of the dry imaging material contains an org. elec. conductive polymer doped with a dopant represented by [Rf-(L1)m]p-Y-[(L2)n-A]q (Rf = F-substituted hydrocarbon chain; L1,2 = divalent bonding group; Y = tri- or tetravalent bonding group; A = anion, base thereof; m, n = 0, 1; p = integer 1-3; and q = 2, 3).

IT 676473-69-1

RL: MOA (Modifier or additive use); USES (Uses) (dopant; dry imaging material contg. org. elec. conductive polymer antistatic agent)

RN 676473-69-1 HCAPLUS

$$\begin{array}{c} \text{OSO}_3\text{H} \\ \text{HO}_3\text{SO}-\text{CH}_2-\text{CH}-\text{CH}_2-\text{O} \end{array}$$

•2 Li

IC ICM G03C001-76 ICS G03C001-498

CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

Section cross-reference(s): 38, 76

IT 647859-72-1 676473-53-3 676473-56-6 676473-60-2 676473-68-0 676473-71-5 676473-72-6 676473-74-8 676473-69-1 676473-76-0 676473-78-2 676473-79-3 676473-80-6 676473-82-8 676473-83-9

RL: MOA (Modifier or additive use); USES (Uses) (dopant; dry imaging material contg. org. elec. conductive polymer antistatic agent)

L23 ANSWER 7 OF 17 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:

2003:331231 HCAPLUS

DOCUMENT NUMBER:

139:62615

TITLE:

Discovery of a Simple Picomolar Inhibitor of

Cholesteryl Ester Transfer Protein

AUTHOR (S):

Reinhard, Emily J.; Wang, Jane L.; Durley, Richard C.; Fobian, Yvette M.; Grapperhaus, Margaret L.; Hickory, Brian S.; Massa, Mark A.; Norton, Monica B.; Promo, Michele A.; Tollefson, Michael B.; Vernier, William F.; Connolly, Daniel T.; Witherbee, Bryan J.; Melton, Michele A.; Regina, Karen J.; Smith, Mark E.; Sikorski,

James A.

CORPORATE SOURCE:

Pharmacia Discovery Research, Chesterfield, MO,

63017-1732, USA

SOURCE:

Journal of Medicinal Chemistry (2003), 46(11),

2152-2168

CODEN: JMCMAR; ISSN: 0022-2623 American Chemical Society

PUBLISHER: American DOCUMENT TYPE: Journal

English

LANGUAGE: OTHER SOURCE(S):

CASREACT 139:62615

GI

AB A novel series of substituted N-[3-(1,1,2,2tetrafluoroethoxy) benzyl] -N-(3-phenoxyphenyl) -trifluoro-3-amino-2propanols is described which potently and reversibly inhibit cholesteryl ester transfer protein (CETP). Starting from the initial lead I, various substituents were introduced into the 3-phenoxyaniline group to optimize the relative activity for inhibition of the CETP-mediated transfer of [3H]-cholesteryl ester from HDL donor particles to LDL acceptor particles either in buffer or in human serum. The better inhibitors in the buffer assay clustered among compds. in which the phenoxy group was substituted at the 3, 4, or 5 positions. In general, small lipophilic alkyl, haloalkyl, haloalkoxy, and halogen moieties increased potency relative to I, while analogs contg. electron-donating or hydrogen bond accepting groups exhibited lower potency. Compds. with polar or strong electron-withdrawing groups also displayed lower potency. Replacement of the phenoxy ring in I with either simple aliph. or cycloalkyl ethers as well as basic heteroaryloxy groups led to reduced potency. From the better compds., a representative series was prepd. as the chirally pure R(+) enantiomers, and from these, the $\bar{4}$ -chloro-3-ethylphenoxy analog was identified as a potent inhibitor of CETP activity in buffer (IC50 0.77 nM, 59 nM in human The simple R(+) enantiomer represents the most potent acyclic CETP inhibitor reported. The chiral synthesis and biochem. characterization of the 4-chloro-3-ethylphenoxy analog are reported along with its preliminary pharmacol. assessment in animals. IT

35295-35-3, 3-(1,1,2,2-Tetrafluoroethoxy)benzaldehyde RL: RCT (Reactant); RACT (Reactant or reagent)

(prepn. of trifluoro(amino)propanols as inhibitors of cholesteryl ester transfer protein in relation to structure and effect on lipoprotein cholesterol)

RN 35295-35-3 HCAPLUS

CN Benzaldehyde, 3-(1,1,2,2-tetrafluoroethoxy)- (9CI) (CA INDEX NAME)

```
F2CH-CF2-
                     CHO
CC
     1-3 (Pharmacology)
     Section cross-reference(s): 13, 25
   51-28-5, Dnp, reactions
                             59-50-7
                                         75-26-3
                                                   95-57-8
                                                             95-65-8
     95-77-2
               98-17-9
                        99-65-0, 1,3-Dinitrobenzene
                                                      99-89-8
                                                                100-00-5
               106-44-5, p-Cresol, reactions
     101-53-1
                                               106-48-9
                                                          107-06-2.
     1,2-Dichloroethane, reactions
                                     108-39-4, reactions
                                                           108-68-9
     108-85-0 109-04-6
                           123-30-8
                                      123-31-9, 1,4-Benzenediol,
               137-43-9
                            150-19-6
                                      359-41-1, 1,1,1-Trifluoro-2,3-
     reactions
                    371-41-5
                               372-20-3
                                          378-77-8
     epoxypropane
                                                     402-23-3
                                     577-19-5, 1-Bromo-2-nitrobenzene
     402-49-3
               452-70-0
                          576-24-9
                                      585-34-2
     580-51-8, [1,1'-Biphenyl]-3-ol
                                                591-27-5, 3-Aminophenol
     618-45-1, 3-Isopropylphenol
                                   619-60-3
                                             620-17-7, 3-Ethylphenol
     625-95-6, 3-Iodotoluene
                               626-55-1
                                          637-89-8
                                                     645-56-7
                                                                698-71-5
     827-99-6, 3-Trifluoromethoxyphenol
                                          828-27-3
                                                     1125-78-6
     2550-36-9, Bromomethylcyclohexane
                                         2713-34-0
     6418-38-8
                14143-32-9, 4-Chloro-3-ethylphenol
                                                      18979-50-5
     35295-35-3, 3-(1,1,2,2-Tetrafluoroethoxy)benzaldehyde
     52771-21-8, 3-(Trifluoromethoxy)benzaldehyde 64182-61-2
     69739-34-0, tert-Butyldimethylsilyl trifluoromethanesulfonate
     89763-93-9, 2-Fluoro-4-trifluoromethylbenzaldehyde
                                                          143142-90-9,
     (R)-1,1,1-Trifluoro-2,3-epoxypropane
                                            146137-78-2,
     2-Fluoro-5-trifluoromethylbenzaldehyde
                                              159689-88-0,
     3-Trifluoromethoxybenzyl bromide
     RL: RCT (Reactant); RACT (Reactant or reagent)
        (prepn. of trifluoro(amino)propanols as inhibitors of cholesteryl
        ester transfer protein in relation to structure and effect on
       lipoprotein cholesterol)
REFERENCE COUNT:
                               THERE ARE 40 CITED REFERENCES AVAILABLE
                               FOR THIS RECORD. ALL CITATIONS AVAILABLE
                               IN THE RE FORMAT
L23 ANSWER 8 OF 17 HCAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER:
                         2002:831305 HCAPLUS
DOCUMENT NUMBER:
                         138:187270
TITLE:
                         Reactivity study of 1,1,2,4,4,5,7,7,8,8,9,9,9-
                         tridecafluoro-5-trifluoromethyl-3,6-dioxanon-1-
                         ene in nucleophilic reactions: fluorination
                         properties of secondary amine adducts
                         Dlouha, Ivona; Kvicala, Jaroslav; Paleta,
AUTHOR (S):
                         Oldrich
CORPORATE SOURCE:
                         Department of Organic Chemistry, Prague
                         Institute of Chemical Technology, Prague, 16628,
                         Czech Rep.
SOURCE:
                         Journal of Fluorine Chemistry (2002), 117(2),
                         149-159
                         CODEN: JFLCAR; ISSN: 0022-1139
PUBLISHER:
                         Elsevier Science B.V.
DOCUMENT TYPE:
                         Journal
LANGUAGE:
                         English
OTHER SOURCE(S):
                         CASREACT 138:187270
    A series of nucleophiles was reacted with 1,1,2,4,4,5,7,7,8,8,9,9,9-
     tridecafluoro-5-trifluoromethyl-3,6-dioxanon-1-ene (1) as a
     representative of perfluoro(alkyl vinyl ethers). All reactions were
     completely regioselective with the nucleophilic attack at the
     terminal carbon atom. Reactions of hydroxy compds., thiols and
```

sec-amines afforded addn. products, but butyllithium, tributylphosphane or complex hydrides caused displacement of vinylic fluorine: butyllithium afforded cis-deriv., while reactions with hydrides and the phosphane led to mixts. of cis- and trans-derivs. Diethylamine and piperidine adducts displayed the property to substitute hydroxyl for fluorine in hexadecan-1-ol. Mol. properties of hexafluoropropene and perfluoro(Me vinyl ether) were calcd. by ab initio method at the MP2/6-311G(d,p) level of theory and their impact on relative reactivity was estd.

IT 499795-46-9P 499795-48-1P

RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)

(fluorination reactivity of tridecafluorotrifluoromethyldioxanone ne in nucleophilic reactions and properties of secondary amine adducts)

RN 499795-46-9 HCAPLUS

CN

Benzene, 1-[1,1,2-trifluoro-2-[1,1,2,3,3,3-hexafluoro-2-(heptafluoropropoxy)propoxy]ethoxy]-4-[(trifluoromethyl)thio]- (9CI) (CA INDEX NAME)

RN 499795-48-1 HCAPLUS

CN Benzene, 1,2-bis[1,1,2-trifluoro-2-[1,1,2,3,3,3-hexafluoro-2-(heptafluoropropoxy)propoxy]ethoxy]- (9CI) (CA INDEX NAME)

CC 22-4 (Physical Organic Chemistry)

IT 408-38-8P, 1-Fluorohexadecane 254981-43-6P 254981-47-0P 254981-53-8P 254981-59-4P 499795-43-6P 499795-44-7P 499795-45-8P **499795-46-9P** 499795-47-0P

499795-48-1P 499795-49-2P 499795-50-5P 499795-51-6P RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)

(fluorination reactivity of tridecafluorotrifluoromethyldioxanone ne in nucleophilic reactions and properties of secondary amine adducts)

REFERENCE COUNT:

THERE ARE 43 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L23 ANSWER 9 OF 17 HCAPLUS COPYRIGHT 2006 ACS on STN ACCESSION NUMBER: 2002:734318 HCAPLUS

DOCUMENT NUMBER:

137:270136

TITLE:

Organic electroluminescent element and display

devices

INVENTOR(S):

Naito, Katsuyuki

PATENT ASSIGNEE(S): SOURCE: Toshiba Corp., Japan Jpn. Kokai Tokkyo Koho, 17 pp.

CODEN: JKXXAF

DOCUMENT TYPE:

Patent

LANGUAGE:

Japanese

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|------|----------|-----------------|--------------|
| | | | | |
| JP 2002280177 | A2 | 20020927 | JP 2001-74540 | |
| | | | | 200103 15 |
| PRIORITY APPLN. INFO.: | | | JP 2001-74540 | |
| | | | | 200103 |
| | | | | 15 |

AB The devices comprise: a glass substrate; an anode; a hole transport layer; a phosphor layer; an electron transport layer; and a cathode, where the phosphor layer contains a light-emitting dye contg. a cyano group having an octal Log P > 6.5.

IT 462631-44-3

RL: DEV (Device component use); USES (Uses)

(org. electroluminescent element and display devices)

RN 462631-44-3 HCAPLUS

CN Poly[[2,5-bis(1,1,2,2-tetrafluoro-2-hydroxyethoxy)-1,4-phenylene]-1,2-ethenediyl] (9CI) (CA INDEX NAME)

$$\begin{bmatrix}
HO-CF_2-CF_2-O\\
O-CF_2-CF_2-OH
\end{bmatrix}$$

IC ICM H05B033-14

ICS C09K011-06; H05B033-12; H05B033-22

CC 73-5 (Optical, Electron, and Mass Spectroscopy and Other Related Properties)

IT 147-14-8, Copper phthalocyanine 2085-33-8, Tris(8-quinolinolato)aluminum 7429-90-5, Aluminum, uses 11099-20-0 50926-11-9, ITO 65181-78-4, TPD 123847-85-8, α-NPD 462631-38-5 462631-42-1 462631-44-3 462631-46-5 462631-47-6 462631-48-7 463358-14-7, Poly(butyl-5,8-quinoxalinediyl)

RL: DEV (Device component use); USES (Uses)

(org. electroluminescent element and display devices)

L23 ANSWER 10 OF 17 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:

2000:792832 HCAPLUS

DOCUMENT NUMBER:

134:127686

TITLE:

Pyrido[2,3-d]pyrimidin-7-one Inhibitors of

Cyclin-Dependent Kinases

AUTHOR(S):

Barvian, Mark; Boschelli, Dianne; Cossrow, Jennifer; Dobrusin, Ellen; Fattaey, Ali; Fritsch, Alex; Fry, David; Harvey, Patricia; Keller, Paul; Garrett, Michelle; La, Frances; Leopold, Wilbur; McNamara, Dennis; Quin, Marie; Trumpp-Kallmeyer, Susanne; Toogood, Peter; Wu,

Zhipei; Zhang, Erli

CORPORATE SOURCE: Departments of Chemistry and Cancer Research,

> Parke-Davis Pharmaceutical Research Division of Warner Lambert Company, Ann Arbor, MI, 48105,

Journal of Medicinal Chemistry (2000), 43(24), SOURCE:

4606-4616

CODEN: JMCMAR; ISSN: 0022-2623

PUBLISHER:

American Chemical Society

DOCUMENT TYPE:

Journal English

LANGUAGE:

OTHER SOURCE(S): CASREACT 134:127686

The identification of 8-ethyl-2-phenylamino-8H-pyrido[2,3d]pyrimidin-7-one as an inhibitor of Cdk4 led to the initiation of a program to evaluate related pyrido[2,3-d]pyrimidin-7ones for inhibition of cyclin-dependent kinases (Cdks). Anal. of more than 60 analogs has identified some clear SAR trends that may be exploited in the design of more potent Cdk inhibitors. The most potent Cdk4 inhibitors reported in this study inhibit Cdk4 with IC50 = 0.004 μ M ([ATP] = 25 μ M). X-ray crystallog. anal. of representative compds. bound to the related kinase, Cdk2, reveals that they occupy the ATP binding site. Modest selectivity between Cdks is exhibited by some compds., and Cdk4-selective inhibitors block pRb+ cells in the G1-phase of the cell division cycle.

IT 831-75-4, Benzenamine, 3-(1,1,2,2-tetrafluoroethoxy)-

RL: RCT (Reactant); RACT (Reactant or reagent) (synthesis and structure-activity relationships of

pyridopyrimidinone as inhibitors of cyclin-dependent kinases)

RN 831-75-4 HCAPLUS

Benzenamine, 3-(1,1,2,2-tetrafluoroethoxy)- (9CI) (CA INDEX NAME) CN

CC 7-3 (Enzymes)

Section cross-reference(s): 1, 28 62-53-3, Aniline, reactions 75-04-7, Ethylamine, reactions IT 99-98-9, n,n-Dimethyl-1,4-diaminobenzene 108-85-0, Cyclohexyl 765-91-3, exo-Norbornyl chloride **831-75-4**, Benzenamine, 3-(1,1,2,2-tetrafluoroethoxy)- 1099-45-2 2359-60-6, 4-(Piperidino)aniline 5909-24-0 38519-63-0, Benzenamine, 4-[2-(diethylamino)ethoxy]-63160-13-4, 2-(Phenylsulfonyl)-3phenyloxaziridine 211244-81-4

RL: RCT (Reactant); RACT (Reactant or reagent)

(synthesis and structure-activity relationships of

pyridopyrimidinone as inhibitors of cyclin-dependent kinases) REFERENCE COUNT: 22 THERE ARE 22 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE

IN THE RE FORMAT

L23 ANSWER 11 OF 17 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:

1999:819428 HCAPLUS

DOCUMENT NUMBER:

132:50411

TITLE:

Aromatic polymers with pendant fluorinated ionic

groups

```
Doyle, Christopher Marc; Fiering, Andrew Edward;
INVENTOR(S):
```

Choi, Susan Kuharcik E. I. Du Pont de Nemours & Co., USA PATENT ASSIGNEE(S):

SOURCE: PCT Int. Appl., 59 pp.

CODEN: PIXXD2

DOCUMENT TYPE:

Patent English

LANGUAGE: FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

| PATENT NO | . KIN | | APPLICATION NO. | DATE |
|------------------------|--|---|--|----------------------------|
| WO 996730 | 4 A1 | 19991229 | WO 1999-US14397 | 199906 25 |
| H M | U, ID, IL, IN, N, MX, NO, NZ, | IS, JP, KP, PL, RO, SG, | CA, CN, CU, CZ, EE, KR, LC, LK, LR, LT, SI, SK, SL, TR, TT, KZ, MD, RU, TJ, TM | GD, GE, HR, LV, MG, MK, |
| RW: GI DI CI | H, GM, KE, LS, K, ES, FI, FR, F, CG, CI, CM, | MW, SD, SL, GB, GR, IE, GA, GN, GW, | SZ, UG, ZW, AT, BE, IT, LU, MC, NL, PT, ML, MR, NE, SN, TD, | SE, BF, BJ, |
| CA 233079: | | | CA 1999-2330792 | 199906 25 |
| AU 994719 | 8 A1 | 20000110 | AU 1999-47198 | 199906 25 |
| AU 752929 EP 109507 | B2 1 A1 | 20021003 20010502 | EP 1999-930717 | 199906 25 |
| R: Di | 1 B1 E, FR, GB, NL, | FI | | 23 |
| JP 2003529 | 5957 T2 | 20030902 | JP 2000-555953 | 199906 25 |
| PRIORITY APPLN | . INFO.: | | US 1998-90620P | P 199806 25 |
| | | | US 1998-93226P | P 199807 17 |
| | | | WO 1999-US14397 | W 199906 25 |

AΒ The title invention discloses a class of unsatd. compds. including contg. a fluoroether-substituted arom. ring, polymers, including ionomers, formed therefrom, and processes for forming them. The compns. of the invention have particular suitability for use in electrochem. applications.

ΙT 252975-64-7P

RL: IMF (Industrial manufacture); PREP (Preparation) (arom. polymers with pendant fluorinated ionic groups)

252975-64-7 HCAPLUS RN

Ethanesulfonic acid, 2-[1-[[2-(4-cyanophenoxy)-1,2,2trifluoroethoxy]difluoromethyl]-1,2,2,2-tetrafluoroethoxy]-1,1,2,2-tetrafluoro-, lithium salt (9CI) (CA INDEX NAME)

• Li

```
IT
     252975-63-6P 252975-69-2P 252975-70-5P
     252975-71-6P 252975-72-7P 252975-73-8P
     252975-74-9P 252975-75-0P 252975-76-1P
     252975-77-2P 252975-78-3P 252975-79-4P
     252975-80-7P 252975-81-8P 252975-82-9P
     252975-83-0P 252975-84-1P 252975-85-2P
     252975-86-3P 252975-87-4P 252975-88-5P
     252975-89-6P 252975-90-9P 252975-91-0P
     252975-92-1P 252975-95-4P 252988-98-0P
     RL: IMF (Industrial manufacture); PRP (Properties); PREP
     (Preparation)
        (arom. polymers with pendant fluorinated ionic groups)
RN
     252975-63-6 HCAPLUS
CN
     Ethanesulfonamide, 2-(4-ethenylphenoxy)-1,1,2,2-tetrafluoro-N-
     [(trifluoromethyl)sulfonyl]-, lithium salt, homopolymer (9CI) (CA
     INDEX NAME)
```

CM 1

CRN 252975-62-5 CMF C11 H8 F7 N O5 S2 . Li

• Li

RN 252975-69-2 HCAPLUS
CN Ethanesulfonic acid, 2-(4-ethenylphenoxy)-1,1,2,2-tetrafluoro-,
lithium salt, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 252975-59-0 CMF C10 H8 F4 O4 S . Li

$$\begin{array}{c} \text{CH} \longrightarrow \text{CH}_2 \\ \text{HO}_3\text{S} - \text{CF}_2 - \text{CF}_2 - \text{O} \end{array}$$

• Li

RN252975-70-5 HCAPLUS CN

Ethanesulfonic acid, 2-(4-ethenylphenoxy)-1,1,2,2-tetrafluoro-, lithium salt, polymer with ethenylbenzene (9CI) (CA INDEX NAME)

CM 1

CRN 252975-59-0 CMF C10 H8 F4 O4 S . Li

$$CH = CH_2$$
 $HO_3S - CF_2 - CF_2 - O$

● Li

CM

CRN 100-42-5 CMF C8 H8

 $_{\rm H_2C}$ = $_{\rm CH}$ - $_{\rm Ph}$

RN252975-71-6 HCAPLUS Ethanesulfonic acid, 2-(4-ethenylphenoxy)-1,1,2,2-tetrafluoro-,

lithium salt, polymer with ethenylbenzene and 2-propenenitrile (9CI) (CA INDEX NAME)

1 CM

CRN 252975-59-0 CMF C10 H8 F4 O4 S . Li

$$CH = CH_2$$
 $CH = CH_2$
 $CH = CH_2$

• Li

CM 2

CRN 107-13-1 CMF C3 H3 N

 $H_2C = CH - C = N$

CM 3

CRN 100-42-5 CMF C8 H8

 $H_2C = CH - Ph$

RN 252975-72-7 HCAPLUS
CN 2-Propenoic acid, butyl ester, polymer with ethenylbenzene and
lithium 2-(4-ethenylphenoxy)-1,1,2,2-tetrafluoroethanesulfonate
(9CI) (CA INDEX NAME)

CM 1

CRN 252975-59-0 CMF C10 H8 F4 O4 S . Li

$$CH = CH_2$$
 $HO_3S - CF_2 - CF_2 - O$

● Li

CM 2

CRN 141-32-2 CMF C7 H12 O2

CM 3

CRN 100-42-5 CMF C8 H8

 $H_2C = CH - Ph$

RN 252975-73-8 HCAPLUS
CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with lithium
2-(4-ethenylphenoxy)-1,1,2,2-tetrafluoroethanesulfonate (9CI) (CA
INDEX NAME)

CM 1

CRN 252975-59-0 CMF C10 H8 F4 O4 S . Li

$$\begin{array}{c} \text{CH----} \text{CH}_2 \\ \text{HO}_3 \text{S---} \text{CF}_2 - \text{CF}_2 - \text{O} \end{array}$$

● Li

CM 2

CRN 80-62-6 CMF C5 H8 O2

$$\begin{array}{c|c} ^{H_2C} & \text{O} \\ \parallel & \parallel \\ \text{Me-} & \text{C-} & \text{C-} & \text{OMe} \end{array}$$

RN 252975-74-9 HCAPLUS

CN Ethanesulfonic acid, 2-(4-ethenylphenoxy)-1,1,2,2-tetrafluoro-, lithium salt, polymer with 2-propenenitrile (9CI) (CA INDEX NAME)

CM 1

CRN 252975-59-0 CMF C10 H8 F4 O4 S . Li

$$CH = CH_2$$
 $CH = CH_2$
 $CH = CH_2$

● Li

CM 2

CRN 107-13-1 CMF C3 H3 N

 $H_2C = CH - C = N$

RN 252975-75-0 HCAPLUS
CN Ethanesulfonic acid, 2-(4-ethenylphenoxy)-1,1,2,2-tetrafluoro-,
lithium salt, polymer with dihydro-3-methylene-2(3H)-furanone (9CI)
(CA INDEX NAME)

CM 1

CRN 252975-59-0 CMF C10 H8 F4 O4 S . Li

$$CH = CH_2$$
 $HO_3S - CF_2 - CF_2 - O$

• Li

CM 2

CRN 547-65-9 CMF C5 H6 O2

RN 252975-76-1 HCAPLUS
CN Ethanesulfonic acid, 2-(4-ethenylphenoxy)-1,1,2,2-tetrafluoro-,
lithium salt, polymer with α-(2-methyl-1-oxo-2-propenyl)ω-ethoxypoly(oxy-1,2-ethanediyl) (9CI) (CA INDEX NAME)

CM 1

CRN 252975-59-0 CMF C10 H8 F4 O4 S . Li

$$\begin{array}{c} \text{CH---} \text{CH}_2 \\ \text{HO}_3 \text{S--} \text{CF}_2 \text{--} \text{CF}_2 \text{--} \text{O} \end{array}$$

• Li

CM 2

CRN 35625-93-5

CMF (C2 H4 O)n C6 H10 O2

CCI PMS

$$\begin{array}{c|c} ^{H_2C} & \text{O} \\ \parallel & \parallel \\ \text{Me-} & \text{C-} & \text{C-} & \text{C-} & \text{CH}_2 - \text{CH}_2 - \text{CH}_2 \\ \end{array} \begin{array}{c} \text{OEt} \\ \end{array}$$

RN 252975-77-2 HCAPLUS

CN 2-Propenoic acid, 2-ethylhexyl ester, polymer with lithium
2-(4-ethenylphenoxy)-1,1,2,2-tetrafluoroethanesulfonate (9CI) (CA
INDEX NAME)

CM 1

CRN 252975-59-0 CMF C10 H8 F4 O4 S . Li

$$CH = CH_2$$
 $HO_3S - CF_2 - CF_2 - O$

● Li

CM 2

CRN 103-11-7 CMF C11 H20 O2

RN 252975-78-3 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, (2-oxo-1,3-dioxolan-4-yl)methyl ester, polymer with butyl 2-propenoate and lithium 2-(4-ethenylphenoxy)-1,1,2,2-tetrafluoroethanesulfonate (9CI) (CA INDEX NAME)

CM 1

CRN 252975-59-0 CMF C10 H8 F4 O4 S . Li

$$\begin{array}{c|c} \text{CH---} \text{CH}_2 \\ \\ \text{HO}_3 \text{S--} \text{CF}_2 \text{--} \text{CF}_2 \text{--} \text{O} \end{array}$$

● Li

CM 2

CRN 13818-44-5 CMF C8 H10 O5

$$\begin{array}{c|c} O & CH_2 \\ \hline \\ O & CH_2 - O - C - C - Me \end{array}$$

CM 3

CRN 141-32-2 CMF C7 H12 O2

RN 252975-79-4 HCAPLUS CN 2-Propenoic acid, met

N 2-Propenoic acid, methyl ester, polymer with lithium 2-(4-ethenylphenoxy)-1,1,2,2-tetrafluoroethanesulfonate (9CI) (CA INDEX NAME)

CM 1

CRN 252975-59-0 CMF C10 H8 F4 O4 S . Li

$$\begin{array}{c} \text{CH} \longrightarrow \text{CH}_2 \\ \text{HO}_3\text{S} - \text{CF}_2 - \text{CF}_2 - \text{O} \end{array}$$

● Li

CM 2

CRN 96-33-3 CMF C4 H6 O2

RN 252975-80-7 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with 2-ethyl-2-[[(1-oxo-2-propenyl)oxy]methyl]-1,3-propanediyl di-2-propenoate and lithium 2-(4-ethenylphenoxy)-1,1,2,2-tetrafluoroethanesulfonate (9CI) (CA INDEX NAME)

CM 1

CRN 252975-59-0 CMF C10 H8 F4 O4 S . Li

$$CH = CH_2$$
 $HO_3S - CF_2 - CF_2 - O$

● Li

CM 2

CRN 15625-89-5 CMF C15 H20 O6

CM 3

CRN 80-62-6 CMF C5 H8 O2

$$\begin{array}{c} ^{\text{H}_2\text{C}} \circ \\ \parallel \ \parallel \\ \text{Me-C-C-OMe} \end{array}$$

RN 252975-81-8 HCAPLUS
CN Ethanesulfonic acid, 2-(4-ethenylphenoxy)-1,1,2,2-tetrafluoro-,
 lithium salt, polymer with α-(2-methyl-1-oxo-2-propenyl) ω-ethoxypoly(oxy-1,2-ethanediyl) and α-(1-oxo-2-propenyl)-ω-[(1-oxo-2-propenyl)oxy]poly(oxy-1,2-ethanediyl)
 (9CI) (CA INDEX NAME)

CM 1

CRN 252975-59-0 CMF C10 H8 F4 O4 S . Li

$$\begin{array}{c} \text{CH} \longrightarrow \text{CH}_2 \\ \text{HO}_3\text{S} - \text{CF}_2 - \text{CF}_2 - \text{O} \end{array}$$

● Li

CM 2

CRN 35625-93-5 CMF (C2 H4 O)n C6 H10 O2 CCI PMS

CM 3

CRN 26570-48-9 CMF (C2 H4 O)n C6 H6 O3 CCI PMS

$$H_2C = CH - C - CH_2 - CH_2$$

RN 252975-82-9 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, methyl ester, polymer with 2-(4-ethenylphenoxy)-1,1,2,2-tetrafluoro-N-[(trifluoromethyl)sulfonyl]ethanesulfonamide lithium salt (9CI) (CAINDEX NAME)

CM 1

CRN 252975-62-5 CMF C11 H8 F7 N O5 S2 . Li

• Li

CM 2

CRN 80-62-6 CMF C5 H8 O2

$$\begin{array}{c|c} ^{H_2C} & \text{O} \\ \parallel & \parallel \\ \text{Me-} \text{C-} \text{C-} \text{OMe} \end{array}$$

RN 252975-83-0 HCAPLUS

CN Ethanesulfonamide, 2-(4-ethenylphenoxy)-1,1,2,2-tetrafluoro-N-[(trifluoromethyl)sulfonyl]-, lithium salt, polymer with ethenylbenzene (9CI) (CA INDEX NAME)

CM 1

CRN 252975-62-5 CMF C11 H8 F7 N O5 S2 . Li

CM 2

CRN 100-42-5 CMF C8 H8

 $H_2C = CH - Ph$

RN 252975-84-1 HCAPLUS

CN 2-Propenoic acid, methyl ester, polymer with 2-(4-ethenylphenoxy)1,1,2,2-tetrafluoro-N-[(trifluoromethyl)sulfonyl]ethanesulfonamide
lithium salt (9CI) (CA INDEX NAME)

CM 1

CRN 252975-62-5 CMF C11 H8 F7 N O5 S2 . Li

$$F_3C-\underset{0}{\overset{\circ}{\underset{||}{\text{CH}}}} \underset{||}{\overset{\circ}{\underset{||}{\text{CH}}}} CH = CH_2$$

● Li

CM 2

CRN 96-33-3 CMF C4 H6 O2

RN 252975-85-2 HCAPLUS

CN 2-Propenoic acid, butyl ester, polymer with 2-(4-ethenylphenoxy)1,1,2,2-tetrafluoro-N-[(trifluoromethyl)sulfonyl]ethanesulfonamide
lithium salt (9CI) (CA INDEX NAME)

CM 1

5

CRN 252975-62-5 CMF C11 H8 F7 N O5 S2 . Li

$$\begin{array}{c|c} & & & \text{CH} = \text{CH}_2 \\ \parallel & \parallel & \parallel \\ \text{F}_3\text{C} - \text{S} - \text{NH} - \text{S} - \text{CF}_2 - \text{CF}_2 - \text{O} \\ \parallel & \parallel & \parallel \\ \text{O} & \text{O} \end{array}$$

● Li

CM 2

CRN 141-32-2 CMF C7 H12 O2

$$\overset{\mathsf{O}}{\parallel}_{\mathsf{n-BuO-C-CH}}^{\mathsf{CH}}$$

RN 252975-86-3 HCAPLUS

Ethanesulfonamide, 2-(4-ethenylphenoxy)-1,1,2,2-tetrafluoro-N-[(trifluoromethyl)sulfonyl]-, lithium salt, polymer with α -(2-methyl-1-oxo-2-propenyl)- ω -ethoxypoly(oxy-1,2-ethanediyl) (9CI) (CA INDEX NAME)

CM 1

CRN 252975-62-5 CMF C11 H8 F7 N O5 S2 . Li

$$F_3C - S - NH - S - CF_2 - CF_2 - O$$

$$0$$

$$0$$

$$0$$

$$0$$

$$0$$

$$0$$

$$0$$

$$0$$

$$0$$

● Li

CM 2

CRN 35625-93-5

CMF (C2 H4 O)n C6 H10 O2

CCI PMS

$$H_2C$$
 O \parallel \parallel \parallel \parallel \parallel \parallel OEt

RN 252975-87-4 HCAPLUS

CN Ethanesulfonamide, 2-(4-ethenylphenoxy)-1,1,2,2-tetrafluoro-N-[(trifluoromethyl)sulfonyl]-, lithium salt, polymer with α -(2-methyl-1-oxo-2-propenyl)- ω -ethoxypoly(oxy-1,2-ethanediyl) and α -(1-oxo-2-propenyl)- ω -[(1-oxo-2-propenyl)oxy]poly(oxy-1,2-ethanediyl) (9CI) (CA INDEX NAME)

CM 1

CRN 252975-62-5 CMF C11 H8 F7 N O5 S2 . Li

• Li

CM 2

CRN 35625-93-5 CMF (C2 H4 O)n C6 H10 O2 CCI PMS

$$H_2C$$
 O H_2C O H_2 O H_2 OEt

CM 3

CRN 26570-48-9 CMF (C2 H4 O)n C6 H6 O3 CCI PMS

$$H_2C = CH - C - CH_2 - CH_2$$

RN 252975-88-5 HCAPLUS

CN 2-Propenoic acid, 2-methyl-, (2-oxo-1,3-dioxolan-4-yl)methyl ester,

polymer with 2-(4-ethenylphenoxy)-1,1,2,2-tetrafluoro-N[(trifluoromethyl)sulfonyl]ethanesulfonamide lithium salt and methyl
2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 252975-62-5 CMF C11 H8 F7 N O5 S2 . Li

● Li

CM 2

CRN 13818-44-5 CMF C8 H10 O5

CM 3

CRN 96-33-3 CMF C4 H6 O2

RN 252975-89-6 HCAPLUS

CN Ethanesulfonic acid, 2-(4-ethenylphenoxy)-1,1,2,2-tetrafluoro-,
lithium salt, polymer with (chloromethyl)oxirane, oxirane and
[(2-propenyloxy)methyl]oxirane (9CI) (CA INDEX NAME)

CM 1

CRN 252975-59-0 CMF C10 H8 F4 O4 S . Li

$$\begin{array}{c} \text{CH} \longrightarrow \text{CH}_2 \\ \text{HO}_3\text{S} - \text{CF}_2 - \text{CF}_2 - \text{O} \end{array}$$

CM 2

CRN 106-92-3 CMF C6 H10 O2

CM 3

CRN 106-89-8 CMF C3 H5 Cl O

CH₂-C1

CM 4

CRN 75-21-8 CMF C2 H4 O

 $\stackrel{\circ}{\triangle}$

RN 252975-90-9 HCAPLUS
CN Ethanesulfonamide, 2-(4-ethenylphenoxy)-1,1,2,2-tetrafluoro-N[(trifluoromethyl)sulfonyl]-, lithium salt, polymer with
(chloromethyl)oxirane, oxirane and [(2-propenyloxy)methyl]oxirane
(9CI) (CA INDEX NAME)

CM 1

CRN 252975-62-5 CMF C11 H8 F7 N O5 S2 . Li

$$F_{3}C-\underset{0}{\overset{O}{\underset{||}{\text{CH}}}}\underset{||}{\overset{O}{\underset{||}{\text{CH}}}}\underset{||}{\overset{O}{\underset{||}{\text{CH}}}}\underset{||}{\overset{C}{\underset{||}{\text{CH}}}}\underset{||}{\overset{C}{\underset{||}{\text{CH}}}}\underset{||}{\overset{C}{\underset{||}{\text{CH}}}}\underset{||}{\overset{C}{\underset{||}{\text{CH}}}}\underset{||}{\overset{C}{\underset{||}{\text{CH}}}}\underset{||}{\overset{C}{\underset{||}{\text{CH}}}}\underset{||}{\overset{C}{\underset{||}{\text{CH}}}}\underset{||}{\overset{C}{\underset{||}{\text{CH}}}}\underset{||}{\overset{C}{\underset{||}{\text{CH}}}}\underset{||}{\overset{C}{\underset{||}{\text{CH}}}}\underset{||}{\overset{C}{\underset{||}{\text{CH}}}}\underset{||}{\overset{C}{\underset{||}{\text{CH}}}}\underset{||}{\overset{C}{\underset{||}{\text{CH}}}}\underset{||}{\overset{C}{\underset{||}{\text{CH}}}}\underset{||}{\overset{C}{\underset{||}{\text{CH}}}}\underset{||}{\overset{C}{\underset{||}{\text{CH}}}}\underset{||}{\overset{C}{\underset{||}{\text{CH}}}}\underset{||}{\overset{C}{\underset{||}{\text{CH}}}}\underset{||}{\overset{C}{\underset{||}{\text{CH}}}}\underset{||}{\overset{C}{\underset{||}{\text{CH}}}}\underset{||}{\overset{C}{\underset{||}{\text{CH}}}\underset{||}{\overset{C}{\underset{||}{\text{CH}}}}\underset{||}{\overset{C}{\underset{||}{\text{CH}}}\underset{||}{\overset{C}{\underset{||}{\text{CH}}}}\underset{||}{\overset{C}{\underset{||}{\text{CH}}}\underset{||}{\overset{C}{\underset{||}{\text{CH}}}\underset{||}{\overset{C}{\underset{||}{\text{CH}}}}\underset{||}{\overset{C}{\underset{||}{\text{CH}}}\underset{||}{\overset{C}{\underset{||}{\text{CH}}}}\underset{||}{\overset{C}{\underset{||}{\text{CH}}}\underset{||}{\overset{C}{\underset{||}{\text{CH}}}\underset{||}{\overset{C}{\underset{||}{\text{CH}}}\underset{||}{\overset{C}{\underset{||}{\text{CH}}}\underset{||}{\overset{C}{\underset{||}{\text{CH}}}\underset{||}{\overset{C}{\underset{||}{\text{CH}}}\underset{||}{\overset{C}{\underset{||}{\text{CH}}}\underset{||}{\overset{C}{\underset{||}{\text{CH}}}\underset{||}{\overset{C}{\underset{||}{\text{CH}}}\underset{||}{\overset{C}{\underset{||}{\text{CH}}}\underset{||}{\overset{C}{\underset{||}{\text{CH}}}\underset{||}{\overset{C}{\underset{||}{\text{CH}}}\underset{||}{\overset{C}{\underset{||}{\text{CH}}}\underset{||}{\overset{C}{\underset{||}{\text{CH}}}\underset{||}{\overset{C}{\underset{||}{\text{CH}}}\underset{||}{\overset{C}{\underset{||}{\text{CH}}}\underset{||}{\overset{C}{\underset{||}{\text{CH}}}\underset{||}{\overset{C}{\underset{||}{\text{CH}}}\underset{||}{\overset{C}{\underset{||}{\text{CH}}}\underset{||}{\overset{C}{\underset{||}{\text{CH}}}\underset{||}{\overset{C}{\underset{||}{\text{CH}}}\underset{||}{\overset{C}{\underset{||}{\text{CH}}}\underset{||}{\overset{C}{\underset{||}{\text{CH}}}\underset{||}{\overset{C}{\underset{||}{\text{CH}}}\underset{||}{\overset{C}{\underset{||}{\text{CH}}}\underset{||}{\overset{C}{\underset{||}{\text{CH}}}\underset{||}{\overset{C}{\underset{||}{\text{CH}}}\underset{||}{\overset{C}{\underset{||}{\text{CH}}}\underset{||}{\overset{C}{\underset{||}{\text{CH}}}\underset{||}{\overset{C}{\underset{||}{\text{CH}}}\underset{||}{\overset{C}{\underset{||}{\text{CH}}}\underset{||}{\overset{C}{\underset{||}{\text{CH}}}\underset{||}{\overset{C}{\underset{||}{\overset{C}{\underset{||}{\text{CH}}}}\underset{||}{\overset{C}{\underset{||}{\text{CH}}}\underset{||}{\overset{C}{\underset{||}{\text{CH}}}\underset{||}{\overset{C}{\underset{||}{\text{CH}}}\underset{||}{\overset{C}{\underset{||}{\text{CH}}}\underset{||}{\overset{C}{\underset{||}{\text{CH}}}\underset{||}{\overset{C}{\underset{||}{\text{CH}}}\underset{||}{\overset{C}{\underset{||}{\text{CH}}}\underset{||}{\overset{C}{\underset{|}{\text{CH}}}\underset{||}{\overset{C}{\underset{||}{\text{CH}}}\underset{||}{\overset{C}{\underset{||}{\text{CH}}}\underset{||}{\overset{C}{\underset{||}{\text{CH}}}\underset{||}{\overset{C}{\underset{||}{\text{CH}}}\underset{||}{\overset{C}{\underset{||}{\overset{C}{\underset{||}{\text{CH}}}}\underset{||}{\overset{C}{\underset{||}{\overset{C}{\underset{||}{\text{CH}}}}\underset{||}{\overset{C}{\underset{|}{\text{CH}}}\underset{||}{\overset{C}{\underset{|}{\text{CH}}}\underset{|}{\overset{C}{\underset{|}{\text{CH}}}}\underset{|}{\overset{C}{\underset$$

CM 2

CRN 106-92-3 CMF C6 H10 O2

CM 3

CRN 106-89-8 CMF C3 H5 Cl O

CM 4

CRN 75-21-8 CMF C2 H4 O



CN

RN 252975-91-0 HCAPLUS

1,3-Benzenedicarboxylic acid, 5-(1,1,2,2-tetrafluoro-2-sulfoethoxy)-, 1,3-dimethyl ester, lithium salt, polymer with bis(2-hydroxyethyl) 1,4-benzenedicarboxylate (9CI) (CA INDEX NAME)

CM 1

CRN 252975-68-1 CMF C12 H10 F4 O8 S . Li

CM 2

CRN 959-26-2 CMF C12 H14 O6

RN 252975-92-1 HCAPLUS

CN 1,3-Benzenedicarboxylic acid, 5-[1,1,2-trifluoro-2-[1,1,2,3,3,3-hexafluoro-2-(1,1,2,2-tetrafluoro-2-sulfoethoxy)propoxy]ethoxy]-, 1,3-dimethyl ester, lithium salt, polymer with bis(2-hydroxyethyl) 1,4-benzenedicarboxylate (9CI) (CA INDEX NAME)

CM 1

CRN 252975-65-8 CMF C17 H11 F13 O10 S . Li

• Li

CM 2

CRN 959-26-2 CMF C12 H14 O6

RN 252975-95-4 HCAPLUS

CN 2-Propenoic acid, butyl ester, polymer with 2-(4-ethenylphenoxy)1,1,2,2-tetrafluoro-N-[(trifluoromethyl)sulfonyl]ethanesulfonamide
lithium salt and lithium 2-(4-ethenylphenoxy)-1,1,2,2tetrafluoroethanesulfonate (9CI) (CA INDEX NAME)

CM 1

CRN 252975-62-5 CMF C11 H8 F7 N O5 S2 . Li

● Li

CM 2

CRN 252975-59-0 CMF C10 H8 F4 O4 S . Li

$$\begin{array}{c} \text{CH} \longrightarrow \text{CH}_2 \\ \text{HO}_3\text{S} - \text{CF}_2 - \text{CF}_2 - \text{O} \end{array}$$

• Li

CM 3

CRN 141-32-2 CMF C7 H12 O2

RN 252988-98-0 HCAPLUS

CN Benzenemethanaminium, ar-ethenyl-N,N,N-trimethyl-, salt with 2-(4-ethenylphenoxy)-1,1,2,2-tetrafluoroethanesulfonic acid (1:1), polymer with lithium 2-(4-ethenylphenoxy)-1,1,2,2-tetrafluoroethanesulfonate and methyl 2-methyl-2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 252975-59-0 CMF C10 H8 F4 O4 S . Li

$$CH = CH_2$$
 $CH = CH_2$
 $CH = CH_2$

● Li

CM 2

CRN 80-62-6 CMF C5 H8 O2

$$\begin{array}{c|c} ^{H_2C} & o \\ \parallel & \parallel \\ \text{Me-} & C- & C- & OMe \end{array}$$

CM 3

CRN 252988-95-7

CMF C12 H18 N . C10 H7 F4 O4 S

CM 4

CRN 252988-94-6 CMF C10 H7 F4 O4 S

CM 5

CRN 53867-17-7 CMF C12 H18 N CCI IDS



 $D1-CH=CH_2$

 Me_3+N-CH_2-D1

IT 113939-45-0P 252975-56-7P 252975-57-8P
 252975-58-9P 252975-59-0P 252975-60-3P
 252975-61-4P 252975-62-5P 252975-65-8P
 252975-66-9P 252975-67-0P 252975-68-1P
 252988-95-7P 252988-97-9P
 RL: IMF (Industrial manufacture); RCT (Reactant); PREP
 (Preparation); RACT (Reactant or reagent)
 (arom. polymers with pendant fluorinated ionic groups)
RN 113939-45-0 HCAPLUS
CN Benzene, 1-bromo-4-(2-bromo-1,1,2,2-tetrafluoroethoxy)- (9CI) (CAINDEX NAME)

RN 252975-56-7 HCAPLUS CN Ethanesulfonyl chloride, 2-(4-bromophenoxy)-1,1,2,2-tetrafluoro-(9CI) (CA INDEX NAME)

RN 252975-57-8 HCAPLUS

CN Ethanesulfinic acid, 2-(4-bromophenoxy)-1,1,2,2-tetrafluoro-, sodium salt (9CI) (CA INDEX NAME)

Na

RN 252975-58-9 HCAPLUS

CN Ethanesulfonic acid, 2-(4-bromophenoxy)-1,1,2,2-tetrafluoro-,
lithium salt (9CI) (CA INDEX NAME)

● Li

RN 252975-59-0 HCAPLUS

CN Ethanesulfonic acid, 2-(4-ethenylphenoxy)-1,1,2,2-tetrafluoro-,
lithium salt (9CI) (CA INDEX NAME)

$$CH = CH_2$$
 $HO_3S - CF_2 - CF_2 - O$

● Li

RN 252975-60-3 HCAPLUS

CN Ethanesulfonyl fluoride, 2-(4-bromophenoxy)-1,1,2,2-tetrafluoro-(9CI) (CA INDEX NAME)

RN 252975-61-4 HCAPLUS

CN Ethanesulfonamide, 2-(4-bromophenoxy)-1,1,2,2-tetrafluoro-N[(trifluoromethyl)sulfonyl]-, lithium salt (9CI) (CA INDEX NAME)

RN 252975-62-5 HCAPLUS

CN Ethanesulfonamide, 2-(4-ethenylphenoxy)-1,1,2,2-tetrafluoro-N[(trifluoromethyl)sulfonyl]-, lithium salt (9CI) (CA INDEX NAME)

$$F_3C-\underset{0}{\overset{\circ}{\underset{\longrightarrow}}} NH-\underset{0}{\overset{\circ}{\underset{\longrightarrow}}} CF_2-CF_2-O$$

$$CH=CH_2$$

• Li

RN 252975-65-8 HCAPLUS

CN 1,3-Benzenedicarboxylic acid, 5-[1,1,2-trifluoro-2-[1,1,2,3,3,3-hexafluoro-2-(1,1,2,2-tetrafluoro-2-sulfoethoxy)propoxy]ethoxy]-,
1,3-dimethyl ester, lithium salt (9CI) (CA INDEX NAME)

• Li

RN 252975-66-9 HCAPLUS

CN 1,3-Benzenedicarboxylic acid, 5-(2-bromo-1,1,2,2-tetrafluoroethoxy), dimethyl ester (9CI) (CA INDEX NAME)

RN 252975-67-0 HCAPLUS

CN 1,3-Benzenedicarboxylic acid, 5-[2-(chlorosulfonyl)-1,1,2,2tetrafluoroethoxy]-, dimethyl ester (9CI) (CA INDEX NAME)

RN 252975-68-1 HCAPLUS

CN 1,3-Benzenedicarboxylic acid, 5-(1,1,2,2-tetrafluoro-2-sulfoethoxy)-, 1,3-dimethyl ester, lithium salt (9CI) (CA INDEX NAME)

● Li

RN 252988-95-7 HCAPLUS

CN Benzenemethanaminium, ar-ethenyl-N,N,N-trimethyl-, salt with 2-(4-ethenylphenoxy)-1,1,2,2-tetrafluoroethanesulfonic acid (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 252988-94-6 CMF C10 H7 F4 O4 S

CM 2

CRN 53867-17-7 CMF C12 H18 N CCI IDS

 $D1-CH=CH_2$

 Me_3+N-CH_2-D1

RN 252988-97-9 HCAPLUS
CN Benzenemethanaminium, ar-ethenyl-N,N,N-trimethyl-, salt with 2-(4-ethenylphenoxy)-1,1,2,2-tetrafluoro-N[(trifluoromethyl)sulfonyl]ethanesulfonamide (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 252988-96-8 CMF C11 H7 F7 N O5 S2

CM 2

CRN 53867-17-7 CMF C12 H18 N CCI IDS

 $D1-CH=CH_2$

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Me_3+N-CH_2-D1
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IC
     ICM C08F012-30
         C07C317-18; C08G063-688; C07C311-24; C07C309-11; H01M006-18;
          H01M010-40; H01B001-12
CC
     35-4 (Chemistry of Synthetic High Polymers)
     Section cross-reference(s): 76
     252975-64-7P
     RL: IMF (Industrial manufacture); PREP (Preparation)
        (arom. polymers with pendant fluorinated ionic groups)
     252975-63-6P 252975-69-2P 252975-70-5P
     252975-71-6P 252975-72-7P 252975-73-8P
     252975-74-9P 252975-75-0P 252975-76-1P
     252975-77-2P 252975-78-3P 252975-79-4P
     252975-80-7P 252975-81-8P 252975-82-9P
     252975-83-0P 252975-84-1P 252975-85-2P
     252975-86-3P 252975-87-4P 252975-88-5P
     252975-89-6P 252975-90-9P 252975-91-0P
     252975-92-1P 252975-95-4P 252988-98-0P
     RL: IMF (Industrial manufacture); PRP (Properties); PREP
     (Preparation)
        (arom. polymers with pendant fluorinated ionic groups)
IT
    113939-45-0P 252975-56-7P 252975-57-8P
     252975-58-9P 252975-59-0P 252975-60-3P
     252975-61-4P 252975-62-5P 252975-65-8P
     252975-66-9P 252975-67-0P 252975-68-1P
     252988-95-7P 252988-97-9P
     RL: IMF (Industrial manufacture); RCT (Reactant); PREP
     (Preparation); RACT (Reactant or reagent)
        (arom. polymers with pendant fluorinated ionic groups)
REFERENCE COUNT:
                               THERE ARE 4 CITED REFERENCES AVAILABLE FOR
                         4
                               THIS RECORD. ALL CITATIONS AVAILABLE IN
                               THE RE FORMAT
```

L23 ANSWER 12 OF 17 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:

1999:642910 HCAPLUS

DOCUMENT NUMBER:

132:17695

TITLE:

Rheological changes of suspensions induced by

electrohydrodynamic instability

AUTHOR(S):

Otsubo, Yasufumi; Edamura, Kazuya; Fukube,

Hiroyuki; Deyama, Kazuhito

CORPORATE SOURCE:

Department of Image Science, Faculty of

Engineering, Chiba University, Chiba, 263, Japan International Journal of Modern Physics B

SOURCE:

(1999), 13(14, 15 & 16), 1705-1712

CODEN: IJPBEV; ISSN: 0217-9792

World Scientific Publishing Co. Pte. Ltd.

DOCUMENT TYPE:

PUBLISHER:

Journal

LANGUAGE:

JAGE: English
A new type of ER suspension is invented with a fluorinated org.

compd. The suspensions show a viscosity increase without yield stress on the application of elec. fields. The results cannot be explained by the chain formation mechanism. After the ER expts., the plate surface of rheometer is covered with stripes of aggregated particles. The periodic structure may be formed in the electrified suspensions. When a dielec. liq. is subjected to high elec. fields, the secondary motion of liq. can be induced. The electrohydrodynamic convection is responsible for the periodic distribution of particles. The ER effect of the suspensions may be generated by a combined effect of electrohydrodynamic convection and external shear.

IT 71481-46-4

CN

RL: PEP (Physical, engineering or chemical process); PRP (Properties); TEM (Technical or engineered material use); PROC (Process); USES (Uses)

(rheol. changes of suspensions induced by electrohydrodynamic instability)

RN 71481-46-4 HCAPLUS

1-Propanaminium, N,N,N-trimethyl-3-[[[4-

[(nonadecafluorononyl)oxy]phenyl]sulfonyl]amino]-, iodide (9CI) (CAINDEX NAME)

$$\begin{array}{c|c}
O \\
\parallel \\
S-NH-(CH_2)_3-N+Me_3\\
\downarrow \\
O
\end{array}$$

$$\begin{array}{c|c}
F_3C-(CF_2)_8-O
\end{array}$$

• I-

CC 76-4 (Electric Phenomena)

Section cross-reference(s): 38

IT 71481-46-4

RL: PEP (Physical, engineering or chemical process); PRP (Properties); TEM (Technical or engineered material use); PROC (Process); USES (Uses)

(rheol. changes of suspensions induced by electrohydrodynamic instability)

REFERENCE COUNT:

THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L23 ANSWER 13 OF 17 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:

1999:450405 HCAPLUS

DOCUMENT NUMBER:

131:137071

TITLE:

Synthesis and mesomorphic properties of novel

phenylbenzoate liquid crystals with a 4-2H-perfluoropropyl-1-butanol tail

AUTHOR(S):

Liu, Hong; Nohira, Hiroyuki

CORPORATE SOURCE: Department Applied Chemistry, Faculty

Engineering, Saitama Univ., Urawa City, 338,

Japan -

SOURCE:

Ferroelectrics (1998), 207(3-4), 541-553

CODEN: FEROA8; ISSN: 0015-0193

Gordon & Breach Science Publishers

DOCUMENT TYPE:

PUBLISHER:

Journal

LANGUAGE:

English

AB Two series of novel liq. crystals, 4'-(2Hperfluoropropylbutyloxy)phenyl 4-alkyloxybenzoates and
4'-(2H-perfluoropropylbutyloxy)phenyl 4-(nperfluoroalkylalkyloxy)benzoates were synthesized and their liq.
cryst. properties investigated. The compds. with a non-fluorinated
achiral tail and a fluorinated achiral tail showed no smectic C
phase, however, a more ordered B phase appeared with the increase of
the achiral chain length. When the achiral terminal tail was
fluorinated, a monotropic smectic C phase appeared and the stability
of the smectic C phase increased as the fluorination extent of the
achiral tail increased.

IT 75895-43-1

RL: RCT (Reactant); RACT (Reactant or reagent)
 (prepn. and mesomorphic properties of phenylbenzoate liq.
 crystals with a 4-2H-perfluoropropyl-1-butoxy tail)

RN 75895-43-1 HCAPLUS

CN Benzoic acid, 4-(nonafluorobutoxy) - (9CI) (CA INDEX NAME)

CC 75-11 (Crystallography and Liquid Crystals)

Section cross-reference(s): 76

IT 103-16-2, p-(Benzyloxy)phenol 431-90-3 627-27-0, 3-Buten-1-ol
2493-84-7, 4-Octyloxybenzoic acid 75895-43-1

RL: RCT (Reactant); RACT (Reactant or reagent)

10

(prepn. and mesomorphic properties of phenylbenzoate liq.

crystals with a 4-2H-perfluoropropyl-1-butoxy tail)

REFERENCE COUNT:

THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L23 ANSWER 14 OF 17 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:

1998:464360 HCAPLUS

DOCUMENT NUMBER:

129:122975

TITLE:

Salts of perfluorinated sulfonamides or

sulfinamides and their use as ionic conductors

and as catalysts

INVENTOR(S):

Armand, Michel; Choquette, Yves; Gauthier,

Michel; Michot, Christophe

PATENT ASSIGNEE(S):

Centre National de la Recherche Scientifique

(CNRS), Fr.; Hydro-Quebec

SOURCE:

Eur. Pat. Appl., 65 pp.
CODEN: EPXXDW

DOCUMENT TYPE:

Patent

LANGUAGE:

French

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

| PATENT NO. | KIND DATE | | APPLICATION NO. | DATE | |
|------------|-----------|----------|-----------------|--------|--|
| EP 850920 | A2 | 19980701 | EP 1997-403187 | 199712 | |
| EP 850920 | A3 | 19980708 | | 30 | |

| EP | 850920 R: AT, PT, | BE, IE, | CH, | DE, | 20020911 DK, ES, FR, LV, FI, RO | GB, GR, IT, LI, LU, | NL, SE, MC, |
|----------------|---|---------------------------------------|--------------------|--------------------------|---|---|---|
| CA | 2194127 | · | · | | | CA 1996-2194127 | 199612 |
| CA | 2199231 | | | AA | 19980905 | CA 1997-2199231 | 30 199703 |
| CA | 2244979 | | | AA | 19980709 | CA 1997-2244979 | 05 199712 |
| CA | 2248242 | | | AA | 19980709 | CA 1997-2248242 | 30 199712 |
| CA | 2248244 | | | AA | 19980709 | CA 1997-2248244 | 30 199712 |
| CA | 2248246 | | | AA | 19980709 | CA 1997-2248246 | 30 199712 |
| CA | 2248303 | | | AA | 19980709 | CA 1997-2248303 | 30 |
| CA | 2248304 | | | AA | 19980709 | CA 1997-2248304 | 199712 30 |
| WO | 9829358 | | | A2 | 19980709 | WO 1997-CA1008 | 199712 30 |
| wo | 9829358 | | | A 3 | 19981008 | | 199712 30 |
| | | | | | | | |
| | | BE, | | DE, | DK, ES, FI, | FR, GB, GR, IE, IT, | LU, MC, NL, |
| WO | | BE, | | DE, | | FR, GB, GR, IE, IT, WO 1997-CA1009 | 199712 |
| | RW: AT, PT, | BE, SE | CH, | • | 19980709 | | 199712 30 |
| | RW: AT, PT, 9829399 W: CA, | BE, SE | CH, | A 1 | 19980709 | WO 1997-CA1009 | 199712 |
| WO | RW: AT, PT, 9829399 W: CA, 9829389 | BE, SE | CH, | A1 | 19980709 | WO 1997-CA1009 | 199712 30 199712 |
| WO | RW: AT, PT, 9829399 W: CA, 9829389 W: CA, | BE, SE JP, | US US | A1 | 19980709 19980709 | WO 1997-CA1009 WO 1997-CA1010 | 199712 30 199712 30 199712 30 |
| WO | RW: AT, PT, 9829399 W: CA, 9829389 W: CA, 9829396 W: CA, 9829877 | BE, SE JP, JP, | US US US | A1 A1 A1 | 19980709 19980709 19980709 | WO 1997-CA1009 WO 1997-CA1010 WO 1997-CA1011 WO 1997-CA1012 | 199712 30 199712 30 199712 30 |
| wo wo | RW: AT, PT, 9829399 W: CA, 9829389 W: CA, 9829396 W: CA, 9829877 | BE, SE JP, JP, JP, BE, | US US US | A1 A1 A1 | 19980709 19980709 19980709 DK, ES, FI, | WO 1997-CA1009 WO 1997-CA1010 WO 1997-CA1011 | 199712 30 199712 30 199712 30 199712 30 LU, MC, NL, |
| wo wo | RW: AT, PT, 9829399 W: CA, 9829389 W: CA, 9829396 W: CA, RW: CA, RW: AT, PT, 9829388 W: CA, | BE, SE JP, JP, JP, SE | US US US CH, | A1 A1 A1 DE, | 19980709 19980709 19980709 DK, ES, FI, 19980709 | WO 1997-CA1009 WO 1997-CA1010 WO 1997-CA1011 WO 1997-CA1012 FR, GB, GR, IE, IT, WO 1997-CA1013 | 199712 30 199712 30 199712 30 |
| WO WO WO | RW: AT, PT, 9829399 W: CA, 9829389 W: CA, 9829396 W: CA, 9829877 W: CA, RW: AT, PT, 9829388 W: CA, 889863 | BE, SE JP, JP, JP, SE | US US US CH, | A1 A1 A1 DE, | 19980709 19980709 19980709 DK, ES, FI, 19980709 | WO 1997-CA1009 WO 1997-CA1010 WO 1997-CA1011 WO 1997-CA1012 FR, GB, GR, IE, IT, | 199712 30 199712 30 199712 30 199712 30 LU, MC, NL, |
| WO WO EP | RW: AT, PT, 9829399 W: CA, 9829389 W: CA, 9829396 W: CA, RW: CA, RW: AT, PT, 9829388 W: CA, | BE, SE JP, JP, JP, SE | US US US US US CH, | A1 A1 A1 DE, A1 A2 B1 IT | 19980709 19980709 19980709 DK, ES, FI, 19980709 19990113 20030507 | WO 1997-CA1009 WO 1997-CA1010 WO 1997-CA1011 WO 1997-CA1012 FR, GB, GR, IE, IT, WO 1997-CA1013 | 199712 30 199712 30 199712 30 199712 30 LU, MC, NL, |

| | | | | | 199712 30 |
|-----|--------------------------|------------|----------|----------------|--------------|
| EP | 890176 | B1 | 20010620 | | 30 |
| JP | R: DE, FR, 2000508114 | T2 | 20000627 | JP 1998-529517 | |
| | | | | | 199712 30 |
| JP | 2000508346 | Т2 | 20000704 | JP 1998-529516 | 199712 |
| .το | 2000508676 | Т2 | 20000711 | JP 1998-529514 | 30 |
| UF | 2000300070 | 12 | 20000711 | 0F 1990 329314 | 199712 |
| JР | 2000508677 | Т2 | 20000711 | JP 1998-529515 | 30 |
| | | | | | 199712 30 |
| JP | 2000508678 | Т2 | 20000711 | JP 1998-529518 | 199712 |
| TD | 2002514245 | Т2 | 20020514 | JP 1998-529513 | 30 |
| UP | 2002514245 | 12 | 20020514 | UP 1990-329313 | 199712 |
| US | 6120696 | A | 20000919 | US 1998-125792 | 30 |
| | | | | | 199808 28 |
| US | 6171522 | B1 | 20010109 | US 1998-101811 | 199811 |
| *** | 6222405 | D 1 | | | 19 |
| US | 6333425 | B1 | 20011225 | US 1998-101810 | 199811 |
| US | 6228942 | B1 | 20010508 | US 1998-125798 | 19 |
| | | | | | 199812 02 |
| US | 6395367 | B1 | 20020528 | US 1998-125799 | 199812 |
| | | | | | 02 |
| US | 6319428 | B1 | 20011120 | US 1998-125797 | 199812 |
| US | 6365068 | В1 | 20020402 | US 2000-609362 | 03 |
| | | | | | 200006 30 |
| US | 6576159 | B1 | 20030610 | US 2000-638793 | |
| | | | | | 200008 09 |
| US | 2001024749. | A1 | 20010927 | US 2001-826941 | 200104 |
| US | 6506517 | В2 | 20030114 | | 06 |
| | 2002009650 | A1 | | US 2001-858439 | 200105 |
| | | | , | | 16 |
| US | 2002102380 | A1 | 20020801 | US 2002-107742 | 200203 |
| US | 6835495 | В2 | 20041228 | | 27 |
| | 2003052310 | | | US 2002-253035 | 200209 |
| , | 200205522 | | 00000111 | WO 0000 050000 | 24 |
| US | 2003066988 | A1 | 20030410 | US 2002-253970 | 200209 |

| US 2005074668 | A1 | 20050407 | US 2004-789453 | 24 200402 |
|------------------------|----|----------|-------------------|--------------|
| US 2005123831 | A1 | 20050609 | US 2004-926283 | 27 |
| | | -; | | 200408 25 |
| PRIORITY APPLN. INFO.: | | | CA 1996-2194127 A | 199612 30 |
| | | | CA 1997-2199231 A | 199703 05 |
| | | | WO 1997-CA1008 W | 199712 30 |
| | | | WO 1997-CA1009 W | 199712 30 |
| | | | WO 1997-CA1010 W | 199712 30 |
| | | | WO 1997-CA1011 W | 199712 30 |
| | | | WO 1997-CA1012 W | 199712 30 |
| | | | WO 1997-CA1013 W | 199712 30 |
| | | | US 1998-101810 A | 199811 19 |
| | | | US 1998-101811 A | 199811 19 |
| | | | US 1998-125798 A | 199812 02 |
| | | | US 1998-125799 A | 199812 02 |
| | | | US 1998-125797 A | 199812 03 |
| | | | US 2000-638793 A | 200008 09 |

US 2001-858439

A1

200105 16

US 2002-107742

200203

27

OTHER SOURCE(S): MARPAT 129:122975

The salts comprise a cation and R1SOxN-Z in amts. to balance the pos. and neg. charges, where R1 is halo, perhaloalkyl (optionally interrupted by O, S, or NH) or -alkaryl, R2CF2, R2CF2CF2, R2CF2CF(CF3), or CF3CFR2; R2 is an org. radical which is not perhalogenated; Z is an electron-withdrawing group, which may be the residue of a polymer or may be a polyvalent group attached to other N-SOxR1 moieties; and x = 1 or 2. Thus, a mixt. of 40 mmol acrylonitrile and 60 mmol 4-CH2:CHC6H4SO2N-SO2CF3 Li+ was copolymd. in 82% yield by use of 1,1'-azobis(cyclohexanecarbonitrile) in THF, and the copolymer was used at 20% concn. as a binder in both the carbon anode and the carbon-LiNiO2 cathode of a battery contg. a gelled electrolyte.

RL: RCT (Reactant); RACT (Reactant or reagent)
(salts of perfluorinated sulfonamides or sulfinamides for use as
ionic conductors and as catalysts)

RN 210227-12-6 HCAPLUS

CN Benzenesulfonyl chloride, 3-(1,1,2,2-tetrafluoroethoxy)- (9CI) (CA INDEX NAME)

IC ICM C07C311-48

ICS C07C311-09; C07D307-64; C07D303-34; C07D407-04; C07D207-452; C07D213-76; C07D285-135; C07D251-70; C07D219-10; C07D311-82

CC 35-3 (Chemistry of Synthetic High Polymers)

Section cross-reference(s): 52, 67, 76

51-79-6, Ethyl carbamate ΙT 62-53-3, Benzenamine, reactions 74-89-5, Methylamine, reactions 78-08-0, Vinyltriethoxysilane 92-82-0, Phenazine 95-54-5, o-Phenylenediamine, reactions 96-24-2, 3-Chloro-1,2-propanediol 97-93-8, Triethylaluminum, reactions 98-16-8, 3-(Trifluoromethyl)aniline 98-61-3, 4-Iodobenzenesulfonyl chloride 102-54-5, Ferrocene 111-92-2 Dibutylamine 142-84-7, Dipropylamine 143-15-7, Dodecyl bromide 354-64-3, Pentafluoroethyl iodide 358-23-6, Trifluoromethanesulfonic anhydride 375-72-4, Perfluorobutane-1sulfonyl fluoride 392-95-0, 2-Chloro-3,5-dinitrobenzotrifluoride 421-83-0, Trifluoromethanesulfonyl chloride 541-59-3, Maleimide 581-28-2, 2-Aminoacridine 605-65-2, 5-(Dimethylamino)-1naphthalenesulfonyl chloride 700-16-3, Pentafluoropyridine 764-48-7, Ethylene glycol monovinyl ether 814-68-6, Acryloyl chloride 917-54-4, Methyllithium 920-66-1, 1,1,1,3,3,3-Hexafluoro-2-propanol 1070-89-9, Sodium bis(trimethylsilyl)amide 1111-78-0, Ammonium carbamate 1120-71-4, 1,3-Propane sultone

1120-99-6, 1,2,4-Triazin-3-amine 1126-79-0, Butoxybenzene 1622-32-8, 2-Chloroethanesulfonyl chloride 1633-82-5, 3-Chloropropane-1-sulfonyl chloride 1648-99-3, 2,2,2-Trifluoroethanesulfonyl chloride 2444-68-0, 2495-39-8 2633-67-2, 4-Styrenesulfonyl 9-Vinylanthracene 3520-42-1, Sulforhodamine B 4286-55-9, chloride 6-Bromo-1-hexanol 4628-94-8, Dipotassium 1,3,4-thiadiazole-2,5dithiolate 5130-24-5, Vinyl chloroformate 5231-87-8 6553-96-4, 2,4,6-Triisopropylbenzenesulfonyl chloride 7673-09-8, 7795-95-1, 1-Octanesulfonyl chloride Trichloromelamine 9036-19-5, Igepal CA 520 10444-89-0 10531-50-7, (R)-2,2,2-Trifluoro-1-phenylethanol 13036-75-4, Fluorosulfonic 13360-57-1, Dimethylsulfamoyl chloride anhvdride 13781-67-4. 3-Thiopheneethanol 20611-81-8, Disodium cyanamide 21797-13-7 25322-68-3 27835-99-0 40724-67-2 82985-35-1, Bis[3-(trimethoxysilyl)propyl]amine 210226-82-7 210227-12-6, 3-(1,1,2,2-Tetrafluoroethoxy) benzenesulfonyl chloride 210227-69-3 RL: RCT (Reactant); RACT (Reactant or reagent) (salts of perfluorinated sulfonamides or sulfinamides for use as ionic conductors and as catalysts) 1992:458648 HCAPLUS 117:58648

L23 ANSWER 15 OF 17 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:

DOCUMENT NUMBER:

TITLE:

AUTHOR (S):

Effect of fluorine-containing surfactants on the

structural and photographic characteristics of

black-and-white photographic layers Kononenko, I. I.; D'yachkovskii, D. F.;

Belavtseva, E. M.; Uvarova, N. V. VNII Khim.-Fotogr. Prom., Moscow, Russia

CORPORATE SOURCE: Zhurnal Nauchnoi i Prikladnoi Fotografii (1992), SOURCE:

37(1), .28-32

CODEN: ZNPFEK; ISSN: 0869-6144

DOCUMENT TYPE: Journal LANGUAGE: Russian

Introduction of a nonionic F-contg. surfactant at the stage of microcrystal growth to the Ag (Br, I) emulsion led to the improvement of the emulsion photosensitivity, granularity, resoln., and modulation transfer function. Surfactant promoted uniform distribution of AgI in the microcrystals, and concn. of AgBr near the surface of the emulsion layer.

IT 142599-25-5

RL: USES (Uses)

(photog. and structural properties of silver bromoiodide black-and-white photog. layers prepd. in presence of)

RN 142599-25-5 HCAPLUS

Benzamide, N-(2-hydroxyethyl)-2-[(nonadecafluorononyl)oxy]- (9CI) CN (CA INDEX NAME)

74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes) IT 307-70-0 376-18-1 1997-55-3 2264-25-7 142599-23-3

142599-24-4 142599-25-5 142599-26-6

RL: USES (Uses)

(photog. and structural properties of silver bromoiodide black-and-white photog. layers prepd. in presence of)

L23 ANSWER 16 OF 17 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:

1992:245163 HCAPLUS

DOCUMENT NUMBER:

116:245163

TITLE:

Silver halide photographic material containing

electrically conductive polymer

INVENTOR(S):

Nagasaki, Satoru

PATENT ASSIGNEE(S): SOURCE:

Konica Co., Japan

.

Jpn. Kokai Tokkyo Koho, 15 pp.

CODEN: JKXXAF

DOCUMENT TYPE:

Patent Japanese

LANGUAGE: FAMILY ACC. NUM. COUNT:

r. 1

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|------------------------|------|----------|-----------------|--------------|
| | | | | |
| JP 03219236 | A2 | 19910926 | JP 1990-15369 | 199001 |
| DDIODIEW ADDIN INDO | | | TD 1000 15360 | 25 |
| PRIORITY APPLN. INFO.: | | | JP 1990-15369 | 199001 25 |

AB In the title material having on ≥1 side of a support ≥1 photosensitive Ag halide photog. emulsion layer and nonphotosensitive hydrophilic colloidal layer, the emulsion layer and/or hydrophilic colloidal layer contains ≥1 kind of water-sol. elec. conductive polymers and ≥1 kind of F-contg. surfactants.

IT 75019-57-7 91998-13-9 110432-42-3

RL: USES (Uses)

(antistatic silver halide photog. materials contg.)

RN 75019-57-7 HCAPLUS

Na

RN 91998-13-9 HCAPLUS

CN Benzenesulfonic acid, 4-[(nonadecafluorononyl)oxy]-, sodium salt (9CI) (CA INDEX NAME)

Na

RN 110432-42-3 HCAPLUS

CN Poly(oxy-1,2-ethanediyl), α -[4-[(nonadecafluorononyl)oxy]benzo yl]-ω-hydroxy- (9CI) (CA INDEX NAME)

$$F_3C-(CF_2)_8-O$$

$$C - CH_2-CH_2 - OH$$

$$O$$

IC ICM G03C001-38

ICS G03C001-04; G03C001-85

CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes) Section cross-reference(s): 76

IT 335-95-5, Sodium perfluorooctanoate 57765-32-9 39388-02-8 60131-27-3 **75019-57-7 91998-13-9** 99124-61-5 110432-41-2 110432-42-3 110432-43-4 110538-67-5 110560-25-3 124206-96-8 134556-94-8 133804-78-1 134119-91-8

137188-60-4 137188-63-7 137188-64-8 137223-16-6 141392-47-4 141392-78-1 141392-79-2 141392-80-5

RL: USES (Uses)

(antistatic silver halide photog. materials contg.)

L23 ANSWER 17 OF 17 HCAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:

1989:468069 HCAPLUS

DOCUMENT NUMBER:

111:68069

TITLE:

INVENTOR(S):

Electrooptical liquid-crystal display element

containing dielectric component with fluoro

compound for short switching time Poetsch, Eike; Kurmeier, Hans Adolf;

Eidenschink, Rudolf; Weber, Georg; Waechtler,

Andreas

PATENT ASSIGNEE(S):

Merck Patent G.m.b.H., Fed. Rep. Ger.

SOURCE:

PCT Int. Appl., 83 pp. CODEN: PIXXD2

DOCUMENT TYPE:

Patent

LANGUAGE:

German

FAMILY ACC. NUM. COUNT:

PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE | |
|------------|------------|----------|-----------------|--------------|--|
| WO 8808441 | A 1 | 19881103 | WO 1988-EP335 | 198804 21 | |

| W: JP RW: AT | , US , BE, CH, | DE, FR | , GB, IT, | LU, NI | L, SE | | |
|-----------------|-------------------|--------|-----------|--------|--------------|------------|--------------|
| DE 3714043 | | - | 19881117 | | 1987-3714043 | | |
| | | | | | | | 198704 28 |
| EP 313604 | | A1 | 19890503 | EP | 1988-903807 | | |
| | | | | | | | 198804 21 |
| EP 313604 | | B1 | 19920325 | | | | |
| R: DE | | | • | | | | |
| JP 01503149 | 5 | T2 | 19891026 | JP | 1988-503664 | | |
| | | • | | | | | 198804 21 |
| US 5196140 | | A | 19930323 | US | 1988-294630 | | |
| | | | | | | | 198812 23 |
| US 5348677 | | Α. | 19940920 | US | 1992-963369 | | |
| | | | | | | | 199210 20 |
| PRIORITY APPLN. | INFO.: | | | DE | 1987-3714043 | Α | |
| | | | | | | | 198704 28 |
| | | | | WO | 1988-EP335 | W | |
| | | | | WO | 1300-FE333 | W | 198804 |
| | | | | | | | 21 |
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| | | | | | | | 23 |

AB An electrooptical liq. crystals display device is described comprising a dielec. with ≥2 components, where the dielec. contains ≥1 fluoro compd. R1(A1Z1)mA2R2 [1 of R1 and R2 is H, F, Cl, Br, CN, NCS, C1-15 alkyl whose 1 or 2 CH2 group connected by -O-, -CO-, -O2C-, -CO2-, -CH halogen-, -CHCN-, -CMeCN-, -C.tplbond.C-, and -CH:CH-, and 2 heteroatoms are not connected with each other; the other one of R1 and R2 is a C1-15 perfluoroalkyl in which ≥1 CF2 groups are interconnected through a linking group but 2 heteroatoms are not directly connected with each other; A1, A2 = 1,4-phenylene in which 1 or 2 $\overline{\text{CH}}$ groups may be replaced by N, 1,4-cyclohexylene in which 1 or 2 CH2 groups (not adjacent) may be replaced by -O- or -S-, piperidine-1,4-diyl, 1,4bicyclo[2.2.2]octylene, decahydronaphthalene-2,6-diyl, 1,2,3,4-tetrahydronaphthalene-2,6-diyl, A2 may also be a simple compd.; m = 0-3; Z1 = CO2, O2C, OCH2, CH2O, C2H4, substituted ethylene, simple compd.; for m = 2 or 3 the groups A1 and Z1 can be similar; for m = 0 the sum of C atoms in R1 and R2 is ≥ 8]. The display devices have shorter switching time.

IT 658-46-8 35295-36-4 68834-05-9

RL: RCT (Reactant); RACT (Reactant or reagent) (reaction of, liq.-crystal display contg. fluoro compd. from)

RN 658-46-8 HCAPLUS

CN Phenol, 4-(pentafluoroethoxy)- (9CI) (CA INDEX NAME)

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RN 35295-36-4 HCAPLUS
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CN Benzaldehyde, 4-(1,1,2,2-tetrafluoroethoxy)- (9CI) (CA INDEX NAME)

RN 68834-05-9 HCAPLUS

CN Benzene, 1-bromo-4-(1,1,2,2-tetrafluoroethoxy)- (9CI) (CA INDEX NAME)

IC ICM C09K019-30 ICS C09K019-34

- CC 74-13 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes) Section cross-reference(s): 75, 76
- ΙT 67-64-1, 2-Propanone, reactions 116-14-3, reactions 754-34-7, Heptafluoropropyl iodide 937-14-4, 658-46-8 m-Chloroperbenzoic acid 3108-24-5, Ethylpentadecafluorooctanoate 7383-71-3, 2,2,3,3-Tetrafluoropropylacrylate 25291-17-2 30377-52-7, Ethyl perfluorononanoate **35295-36-4** 38289-29-1, trans-4-Pentylcyclohexanecarboxylic acid 65355-33-1 67589-88-2 67589-89-3 **68834-05-9** 81936-33-6 82832-73-3, 4-(trans-4-Propylcyclohexyl)cyclohexanone 89409-95-0 95881-25-7 116020-44-1 121040-02-6 88639-45-6 121040-05-9 121040-06-0 121040-07-1 121040-03-7 121040-04-8 121040-08-2 121040-09-3 121040-19-5 121061-95-8 121071-19-0 121719-35-5

RL: RCT (Reactant); RACT (Reactant or reagent) (reaction of, liq.-crystal display contg. fluoro compd. from)